

# MONITOUCH

## V8 series



**Expanding the Possibilities of the Future**

**Hakko Electronics Co., Ltd.**  
**[www.monitouch.com](http://www.monitouch.com)**

# MONITOUCH V8<sub>series</sub>

For optimal performance, connectivity and usability  
The MONITOUCH V8 series has expanded the potential of  
programmable operator interface panels.

## Realize the Ideal



### High Performance

The new MONITOUCH series has realized the best possible performance with a newly developed high-speed algorithm and a high level of visibility for efficient operation.

### Connectivity

8-way communication with up to eight kinds of devices and two USB channels ensure high compatibility and expandability of your system.

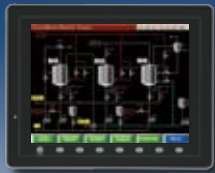
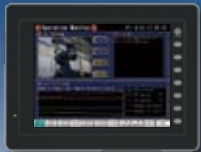
### Usability

User-friendly component parts and functional switches enable simple and speedy display configuration.



|                                                 |                                             |     |
|-------------------------------------------------|---------------------------------------------|-----|
| ■ 65,536 colors                                 | ■ 30 fps video display in 16 million colors | P12 |
| ■ Analog switches                               |                                             | P13 |
| ■ Compatible with 8-way communication           |                                             | P14 |
| ■ Equipped with two USB channels (master/slave) |                                             | P16 |
| ■ Multi-output memory                           | ■ ON delay/ OFF delay                       | P18 |
| ■ Pop-up window                                 | ■ Flash ROM 12.5MB/ SRAM 512KB              | P19 |
| ■ Alarm enhancement                             | ■ Operation log                             | P20 |
| ■ Multi-link 2 Ethernet function                |                                             | P21 |
| ■ Configuration software V-SFT                  |                                             | P22 |
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Our wide range of products allows you to select

|                                                                                                                                                                                                                                                                                                                                                                           |                        | 15.0 inches                                                                                                               | 12.1 inches                                                                                                                        | 10.4 inches                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                           |                        | V815iX                                                                                                                    | V812iS/V812S                                                                                                                       | V810iS/V810S                                                                                                                        |
| <p><b>NEW</b></p> <p><b>V8</b></p> <p>series</p> <p>Revolutionary features for production sites: 8-way communication and 16-million colors high-resolution video display. As well as V8 series have the same panel cutouts as V7 series, the V7 screen program can be utilized in V8 series.</p> <p>A multi-feature model with the ultimate operator interface panel.</p> | High-performance model |  <p>TFT XGA 64K Color</p>                |  <p>TFT SVGA 64K Color</p>                      |  <p>TFT SVGA 64K Color</p>                       |
|                                                                                                                                                                                                                                                                                                                                                                           | Standard model         |                                                                                                                           |                                                                                                                                    |                                                                                                                                     |
| <p><b>V7</b></p> <p>series</p> <p>Comes in a variety of models including large-size (15-inch XGA) and small-size (5.7-inch). A versatile and high-ranking series that can be widely used ranging from the net working to stand-alone.</p>                                                                                                                                 | High-performance model | <p>V715X</p>  <p>TFT XGA 32K Color</p> | <p>V712iS/V712S</p>  <p>TFT SVGA 32K Color</p> | <p>V710iS/V710S</p>  <p>TFT SVGA 32K Color</p> |
|                                                                                                                                                                                                                                                                                                                                                                           | Standard model         |                                                                                                                           |                                                                                                                                    |                                                                                                                                     |
| <p><b>V6</b></p> <p>series</p> <p>Has all of the basic functions. Entry-level models that will satisfy your needs in superior usability and cost-effectiveness.</p>                                                                                                                                                                                                       | Standard model         |                                                                                                                           |                                                                                                                                    |                                                                                                                                     |

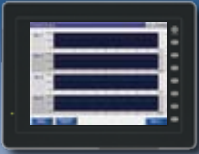
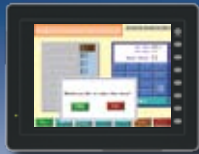
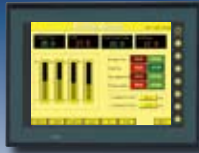


# Select the one that best fits your needs.

**TFT** Display device

**SVGA** Display resolution

**64K Color** Display color

| inches                                                                                                                                              | 8.4 inches                                                                                                                                              | 7.7 inches                                                                                                                                            | 5.7 inches                                                                                                                                                                                                                                                                             |                                                                                                                                                          |                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>V810iT/V810T</b><br><br><b>TFT</b> <b>VGA</b> <b>64K Color</b>   | <b>V808iSD/V808SD</b><br><br><b>TFT</b> <b>SVGA</b> <b>64K Color</b>   |                                                                                                                                                       |                                                                                                                                                                                                                                                                                        |                                                                                                                                                          |                                                                                                                                                     |
| <b>V810iC/V810C</b><br><br><b>TFT</b> <b>VGA</b> <b>64K Color</b>  | <b>V808iCD/V808CD</b><br><br><b>TFT</b> <b>VGA</b> <b>64K Color</b>   | <b>V808iCH/V808CH</b><br><br><b>TFT</b> <b>VGA</b> <b>64K Color</b> | <b>V806iTD/V806TD</b><br><br><b>TFT</b> <b>QVGA</b> <b>64K Color</b>                                                                                                                                | <b>V806iCD/V806CD</b><br><br><b>STN</b> <b>QVGA</b> <b>64K Color</b> | <b>V806iMD/V806MD</b><br><br><b>STN</b> <b>QVGA</b> <b>MONO</b> |
| <b>V710iT/V710T</b><br><br><b>TFT</b> <b>VGA</b> <b>32K Color</b> | <b>V708iSD/V708SD</b><br><br><b>TFT</b> <b>SVGA</b> <b>32K Color</b> |                                                                                                                                                       |                                                                                                                                                                                                                                                                                        |                                                                                                                                                          |                                                                                                                                                     |
| <b>V710C</b><br><br><b>TFT</b> <b>VGA</b> <b>128 Color</b>        |                                                                                                                                                         | <b>V708CD</b><br><br><b>STN</b> <b>VGA</b> <b>128 Color</b>        | <b>V706TD</b><br><br><b>TFT</b> <b>QVGA</b> <b>32K Color</b>                                                                                                                                       | <b>V706CD</b><br><br><b>STN</b> <b>QVGA</b> <b>32K Color</b>        | <b>V706MD</b><br><br><b>STN</b> <b>QVGA</b> <b>MONO</b>        |
|                                                                                                                                                     |                                                                                                                                                         | <b>V608CH</b><br><br><b>STN</b> <b>VGA</b> <b>128 Color</b>        | <b>V606eC</b> <b>V606eM</b><br> <br><b>STN</b> <b>QVGA</b> <b>16 Color</b> <b>STN</b> <b>QVGA</b> <b>MONO</b> |                                                                                                                                                          |                                                                                                                                                     |



# V812 series

High visibility and stability of SVGA.  
Offers you high performance.

12.1-inch model  \*3

High-performance model SVGA 65,536 colors

S



12.1 inches TFT SVGA 64K color 12.5" 512K SRAM 3ch serial COM I/F CF A-B USB

With Ethernet port

V812iS   

Without Ethernet port

V812S 

V812 models

V812   [Power supply specifications] N/A: AC100-240V specifications D: DC24V (CE/UL/cUL approved)  
[Touch switch specifications] N/A: Analog resistive switch M: Matrix resistive switch  
[Functional specifications] N/A: Without built-in LAN port, without optional unit port  
i: With built-in LAN port, with optional unit port

## Communication units

- OPCN-1
- T-Link
- CC-Link
- Ethernet
- PROFIBUS-DP
- DeviceNet \*1
- FL-net
- SX Bus



## Optional units

- Video input + RGB input
- RGB input (2ch)
- Video input + sound output
- RGB input + sound output
- RGB output + sound output
- Sound output



## Serial connection

Modular 8-pin 

- PLC
- Temperature controller/ Inverter
- Card recorder (CREC)
- Bar code reader
- V-I/O
- V-Link
- Touch switch
- PLC ladder transfer
- Modbus slave
- Printer (serial)

## Ethernet

Serial connection

D-Sub 9-pin 

- PLC
- Temperature controller/ Inverter
- General PC
- Bar code reader

USB-A 

USB-B 

## CF Card



| Model                    | V812iS                                                                                                                                                                                                     | V812S            |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Display size             | 12.1 inches                                                                                                                                                                                                |                  |
| Display device           | TFT color LCD                                                                                                                                                                                              |                  |
| Resolution               | 800x600 dots                                                                                                                                                                                               |                  |
| Display colors           | 65,536 colors(without blinks)/32,768 colors(with blinks)                                                                                                                                                   |                  |
| Display memory           | FROM (12.5MB)                                                                                                                                                                                              |                  |
| Backup memory            | SRAM (512KB)                                                                                                                                                                                               |                  |
| D-Sub 9-pin CN1          | RS-232C, RS-422/485, Asynchronous<br>Data length: 7 bits, 8 bits, Parity: even, odd, none<br>Stop bit: 1 bit, 2 bits<br>Baud rate: 4800, 9600, 19200, 38400, 57600, 76800, 115200, 187500 <sup>2</sup> bps |                  |
| Modular 8-pin MJ1/MJ2    | RS-232C • RS-422/485(2-wire), Asynchronous<br>Data length: 7 bits, 8 bits Parity: even, odd, none<br>Stop bit: 1 bit, 2 bits<br>Baud rate: 4800, 9600, 19200, 38400, 57600, 76800, 115200bps               |                  |
| Ethernet                 | 100BASE-TX / 10BASE-T Built-in                                                                                                                                                                             | Option (CU-03-3) |
| Communication I/F        | Equipped                                                                                                                                                                                                   |                  |
| Extend I/F               | Equipped                                                                                                                                                                                                   | -                |
| CF card I/F              | Equipped                                                                                                                                                                                                   |                  |
| USB I/F                  | Type A and B(Ver1.1)                                                                                                                                                                                       |                  |
| Video (4ch)              | GU-00                                                                                                                                                                                                      | -                |
| RGB input                | GU-01                                                                                                                                                                                                      | -                |
| RGB output               | GU-02                                                                                                                                                                                                      | -                |
| Video (2ch)+RGB input    | GU-10                                                                                                                                                                                                      | -                |
| RGB input (2ch)          | GU-11                                                                                                                                                                                                      | -                |
| Sound output             | GU-00 ~ 03                                                                                                                                                                                                 | -                |
| Communication unit       | CU-00 ~ 08                                                                                                                                                                                                 |                  |
| I/O unit                 | V-I/O                                                                                                                                                                                                      |                  |
| CE Marking <sup>*3</sup> | EN61000-6-2, EN61000-6-4                                                                                                                                                                                   |                  |
| UL/cUL <sup>*3</sup>     | UL508/UL1604 <sup>*4</sup>                                                                                                                                                                                 |                  |
| RoHS directive           | Complied                                                                                                                                                                                                   |                  |

\*1 Under development \*2 When connected with SIEMENS MPI

\*3 Only with 24V DC models

\*4 Contact us if UL1604 needs to be supported.

COM I/F Communication unit I/F

CF CF card I/F

A-B USB I/F

AC power Power Supply

Analog Matrix Analog switch / Matrix switch

Video input

RGB RGB input/output

Sound output

Option

V810 series

High-performance panels in 65,536 colors  
Three grades of models from standard to high-performance

10.4-inch model  \*5

High-performance model SVGA

Highly-functional model VGA

Standard model VGA



10.4 inches TFT SVGA 64K color 12.5" FROM 512K SRAM 3ch serial COM I/F CF A-B USB

With Ethernet port

V810iS    

Without Ethernet port

V810S 

10.4 inches TFT VGA 64K color 12.5" FROM 512K SRAM 3ch serial COM I/F CF A-B USB

With Ethernet port

V810iT    

Without Ethernet port

V810T 

10.4 inches TFT VGA 64K color 12.5" FROM 512K SRAM 3ch serial COM I/F CF A-B USB

With Ethernet port

V810iC 

Without Ethernet port

V810C 

V810 models

V810    [Power supply specifications] N/A: AC100-240V specifications D: DC24V (CE/UL/cUL approved)  
[Touch switch specifications] N/A: Analog resistive switch M: Matrix resistive switch  
[Device specifications] S: TFT color LCD (SVGA) T: TFT color LCD (VGA) C: TFT color LCD (VGA)  
[Functional specifications] N/A: Without built-in LAN port, without optional unit port  
i: With built-in LAN port, with optional unit port \*2

\*1 FROM 4.5Mbytes • SRAM 128Kbytes  
\*2 Optional ports are not available in V810iC

Communication units

- OPCN-1
- T-Link
- CC-Link
- Ethernet
- PROFIBUS-DP
- DeviceNet \*3
- FL-net
- SX Bus

Optional units

- Video input + RGB input
- RGB input (2ch)
- Video input + sound output
- RGB input + sound output
- RGB output + sound output
- Sound output

Serial connection

- PLC
- Temperature controller/ Inverter
- Card recorder (CREC)
- Bar code reader
- V-I/O
- V-Link
- PLC ladder transfer
- Modbus slave
- Printer (serial)

Serial connection

- PLC
- Temperature controller/ Inverter
- General PC
- Bar code reader

CF Card

|                     | Model                       | V810iS                                                                                                                                                                                                   | V810S            | V810iT                        | V810T            | V810iC                        | V810C            |
|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------|------------------|-------------------------------|------------------|
| Basic specification | Display size                | 10.4 inches                                                                                                                                                                                              |                  |                               |                  |                               |                  |
|                     | Display device              | TFT color LCD                                                                                                                                                                                            |                  |                               |                  |                               |                  |
|                     | Resolution                  | 800×600 dots                                                                                                                                                                                             |                  |                               | 640×480 dots     |                               |                  |
|                     | Display colors              | 65,536 colors(without blinks)/32,768 colors(with blinks)                                                                                                                                                 |                  |                               |                  |                               |                  |
|                     | Display memory              | FROM (12.5MB)                                                                                                                                                                                            |                  |                               |                  |                               | FROM (4.5MB)     |
|                     | Backup memory               | SRAM (512KB)                                                                                                                                                                                             |                  |                               |                  |                               | SRAM (128MB)     |
| Interface           | D-Sub 9-pin CN1             | RS-232C, RS-422/485, Asynchronous<br>Data length: 7 bits, 8 bits, Parity: even, odd, none<br>Stop bit: 1 bit, 2 bits, Baud rate: 4800, 9600, 19200, 38400, 57600, 76800, 115200, 187500 <sup>4</sup> bps |                  |                               |                  |                               |                  |
|                     | Modular 8-pin MJ1/MJ2       | RS-232C • RS-422/485(2-wire), Asynchronous<br>Data length: 7 bits, 8 bits Parity: even, odd, none<br>Stop bit: 1 bit, 2 bits, Baud rate: 4800, 9600, 19200, 38400, 57600, 76800, 115200bps               |                  |                               |                  |                               |                  |
|                     | Ethernet                    | 100BASE-TX /10BASE-T Built-in                                                                                                                                                                            | Option (CU-03-3) | 100BASE-TX /10BASE-T Built-in | Option (CU-03-3) | 100BASE-TX /10BASE-T Built-in | Option (CU-03-3) |
|                     | Communication I/F           | Equipped                                                                                                                                                                                                 |                  |                               |                  |                               |                  |
|                     | Extend I/F                  | Equipped                                                                                                                                                                                                 | —                | Equipped                      | —                | —                             | —                |
|                     | CF card I/F                 | Equipped                                                                                                                                                                                                 |                  |                               |                  |                               |                  |
|                     | USB I/F                     | Type A and B(Ver1.1)                                                                                                                                                                                     |                  |                               |                  |                               |                  |
| Options             | Video (4ch)                 | GU-00                                                                                                                                                                                                    | —                | GU-00                         | —                | —                             | —                |
|                     | RGB input                   | GU-01                                                                                                                                                                                                    | —                | GU-01                         | —                | —                             | —                |
|                     | RGB output                  | GU-02                                                                                                                                                                                                    | —                | GU-02                         | —                | —                             | —                |
|                     | Video (2ch)+RGB input       | GU-10                                                                                                                                                                                                    | —                | GU-10                         | —                | —                             | —                |
|                     | RGB input (2ch)             | GU-11                                                                                                                                                                                                    | —                | GU-11                         | —                | —                             | —                |
|                     | Sound output                | GU-00 ~ 03                                                                                                                                                                                               | —                | GU-00 ~ 03                    | —                | —                             | —                |
|                     | Communication unit I/O unit | CU-00 ~ 08<br>V-I/O                                                                                                                                                                                      |                  |                               |                  |                               |                  |
| Compatibility       | CE Marking <sup>5</sup>     | EN61000-6-2, EN61000-6-4                                                                                                                                                                                 |                  |                               |                  |                               |                  |
|                     | UL/cUL <sup>5</sup>         | UL508/UL1604 <sup>6</sup>                                                                                                                                                                                |                  |                               |                  |                               |                  |
|                     | RoHS directive              | Complied                                                                                                                                                                                                 |                  |                               |                  |                               |                  |

\*3 Under development \*4 When connected with SIEMENS MPI  
\*5 Only with 24V DC models  
\*6 Contact us if UL1604 needs to be supported.

Legend of icons

 Display size (inches)  Display device  Display resolution  Display colors  FROM capacity  SRAM (byte)  Serial port  Ethernet 100BASE-TX/10BASE-T



# V808series

Compact yet functional panels in 65,536 colors. SVGA models are also available.

8.4-inch model  

## High-performance model SVGA

## Standard model VGA



With Ethernet port

**V808iSD**    

Without Ethernet port

**V808SD** 

With Ethernet port

**V808iCD** 

Without Ethernet port

**V808CD** <sup>\*1</sup> 

## V808 models

V808   D

[Device specifications] S: TFT color LCD (SVGA) C: TFT color LCD (VGA)

[Functional specifications] N/A: Without built-in LAN port, without optional unit port  
i: With built-in LAN port, with optional unit port <sup>\*2</sup>

<sup>\*1</sup> FROM 4.5Mbytes • SRAM 128Kbytes

<sup>\*2</sup> Optional ports are not available in V808iC

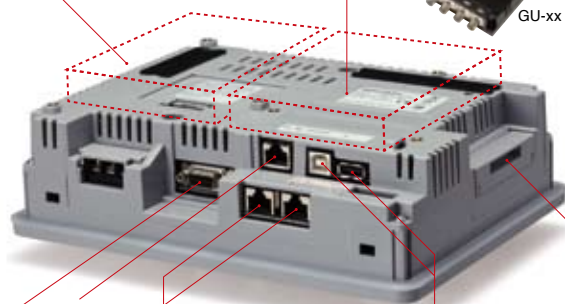
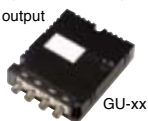
### Communication units

- OPCN-1
- T-Link
- CC-Link
- Ethernet
- PROFIBUS-DP
- DeviceNet <sup>\*3</sup>
- FL-net
- SX Bus



### Optional units

- Video input + RGB input
- RGB input (2ch)
- Video input + sound output
- RGB input + sound output
- RGB output + sound output
- Sound output



### Ethernet

### Serial connection

D-sub 9-pin 

- PLC
- Temperature controller/ Inverter
- General PC
- Bar code reader

### Serial connection

Modular 8-pin 

- PLC
- Temperature controller/ Inverter
- Card recorder (CREC)
- Bar code reader
- V-I/O
- V-Link
- Touch switch
- PLC ladder transfer
- Modbus slave
- Printer (serial)

### USB-A USB-B

### CF Card



|                     | Model                 | V808iSD                                                                                                                                                                                       | V808SD           | V808iCD                       | V808CD           |
|---------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------|------------------|
| Basic specification | Display size          | 8.4 inches                                                                                                                                                                                    |                  |                               |                  |
|                     | Display device        | TFT color LCD                                                                                                                                                                                 |                  |                               |                  |
|                     | Resolution            | 800×600 dots                                                                                                                                                                                  |                  | 640×480 dots                  |                  |
|                     | Display colors        | 65,536 colors (without blinks) / 32,768 colors (with blinks)                                                                                                                                  |                  |                               |                  |
|                     | Display memory        | FROM (12.5MB)                                                                                                                                                                                 |                  |                               | FROM (4.5MB)     |
|                     | Backup memory         | SRAM (512KB)                                                                                                                                                                                  |                  |                               | SRAM (128MB)     |
| Interface           | D-Sub 9-pin CN1       | RS-232C, RS-422/485, Asynchronous<br>Data length: 7 bits, 8 bits, Parity: even, odd, none<br>Stop bit: 1 bit, 2 bits<br>Baud rate: 4800, 9600, 19200, 38400, 57600, 76800, 115200, 187500*bps |                  |                               |                  |
|                     | Modular 8-pin MJ1/MJ2 | RS-232C・RS-422/485(2-wire), Asynchronous<br>Data length: 7 bits, 8 bits Parity: even, odd, none<br>Stop bit: 1 bit, 2 bits<br>Baud rate: 4800, 9600, 19200, 38400, 57600, 76800, 115200bps    |                  |                               |                  |
|                     | Ethernet              | 100BASE-TX /10BASE-T Built-in                                                                                                                                                                 | Option (CU-03-3) | 100BASE-TX /10BASE-T Built-in | Option (CU-03-3) |
|                     | Communication I/F     | Equipped                                                                                                                                                                                      |                  |                               |                  |
|                     | Extend I/F            | Equipped                                                                                                                                                                                      | —                | —                             | —                |
| Options             | CF card I/F           | Equipped                                                                                                                                                                                      |                  |                               |                  |
|                     | USB I/F               | Type A and B (Ver1.1)                                                                                                                                                                         |                  |                               |                  |
|                     | Video (4ch)           | GU-00                                                                                                                                                                                         | —                | —                             | —                |
|                     | RGB input             | GU-01                                                                                                                                                                                         | —                | —                             | —                |
|                     | RGB output            | GU-02                                                                                                                                                                                         | —                | —                             | —                |
|                     | Video (2ch)+RGB input | GU-10                                                                                                                                                                                         | —                | —                             | —                |
|                     | RGB input (2ch)       | GU-11                                                                                                                                                                                         | —                | —                             | —                |
| Compatibility       | Sound output          | GU-00 ~ 03                                                                                                                                                                                    | —                | —                             | —                |
|                     | Communication unit    | CU-00 ~ 08                                                                                                                                                                                    |                  |                               |                  |
|                     | I/O unit              | V-I/O                                                                                                                                                                                         |                  |                               |                  |
|                     | CE Marking            | EN61000-6-2, EN61000-6-4                                                                                                                                                                      |                  |                               |                  |
|                     | UL/cUL                | UL508/UL1604*5                                                                                                                                                                                |                  |                               |                  |
|                     | RoHS directive        | Complied                                                                                                                                                                                      |                  |                               |                  |

<sup>\*3</sup> Under development <sup>\*4</sup> When connected with SIEMENS MPI

<sup>\*5</sup> Contact us if UL1604 needs to be supported.

 Communication unit I/F

 CF card I/F

 USB I/F

 Power Supply

 Analog switch / Matrix switch

 Video input

 RGB input/output

 Sound output

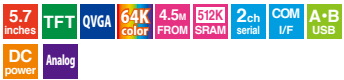
 Option

V806 series

High-performance compact models

5.7-inch model  

Standard model QVGA 65,536 colors      Standard model QVGA (16 grayscale)



With Ethernet port  
**V806iTD**    
Without Ethernet port  
**V806TD**<sup>\*1</sup>  <sup>\*2</sup>



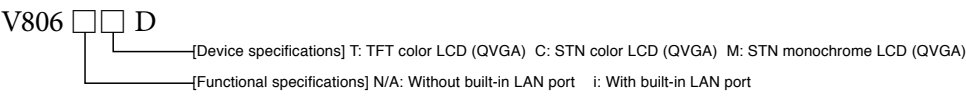
With Ethernet port  
**V806iCD**    
Without Ethernet port  
**V806CD**<sup>\*1</sup>  <sup>\*2</sup>



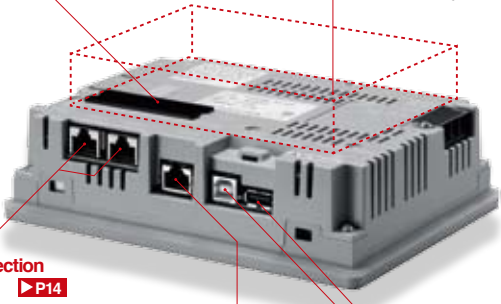
With Ethernet port  
**V806iMD**    
Without Ethernet port  
**V806MD**<sup>\*1</sup>  <sup>\*2</sup>

<sup>\*1</sup> SRAM 128Kbytes  
<sup>\*2</sup> Concurrent use of Ethernet and CF card is not available

V806 models



- Communication units**
- OPCN-1
  - T-Link
  - CC-Link
  - Ethernet
  - PROFIBUS-DP
  - DeviceNet \*3
  - FL-net
  - SX Bus
- Optional units**
- D-Sub 9-pin + CF Card I/F



- Serial connection**  
**Modular 8-pin ▶P14**
- PLC
  - Temperature controller/ Inverter
  - Card recorder (CREC)
  - Bar code reader
  - V-I/O
  - V-Link
  - PLC ladder transfer
  - Modbus slave
  - Printer (serial)
- USB-A USB-B ▶P16**
- Ethernet**

|                     | Model                                  | V806iTD                                                                                                                                                                                                       | V806TD              | V806iCD                             | V806CD              | V806iMD                             | V806MD              |
|---------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------------------|---------------------|-------------------------------------|---------------------|
| Basic specification | Display size                           | 5.7 inches                                                                                                                                                                                                    |                     |                                     |                     |                                     |                     |
|                     | Display device                         | TFT color LCD                                                                                                                                                                                                 |                     | STN color LCD                       |                     | STN monochrome LCD                  |                     |
|                     | Resolution                             | 320x240 dots                                                                                                                                                                                                  |                     |                                     |                     |                                     |                     |
|                     | Display colors                         | 65,536 colors(without blinks)<br>32,768 colors(with blinks)                                                                                                                                                   |                     |                                     |                     | 16 grayscale<br>(with blinks)       |                     |
|                     | Display memory                         | FROM (4.5MB)                                                                                                                                                                                                  |                     |                                     |                     |                                     |                     |
|                     | Backup memory                          | SRAM<br>(512KB)                                                                                                                                                                                               | SRAM<br>(128KB)     | SRAM<br>(512KB)                     | SRAM<br>(128KB)     | SRAM<br>(512KB)                     | SRAM<br>(128KB)     |
| Interface           | D-Sub 9-pin<br>CN1 <sup>*4</sup>       | RS-232C • RS-422/485(2-wire), Asynchronous<br>Data length: 7 bits, 8 bits Parity: even, odd, none<br>Stop bit: 1 bit, 2 bits<br>Baud rate: 4800, 9600, 19200, 38400,<br>57600, 76800, 115200bps               |                     |                                     |                     |                                     |                     |
|                     | Modular 8-pin<br>MJ1/MJ2 <sup>*5</sup> | RS-232C, RS-422/485, Asynchronous<br>Data length: 7 bits, 8 bits, Parity: even, odd, none<br>Stop bit: 1 bit, 2 bits<br>Baud rate: 4800, 9600, 19200, 38400,57600,<br>76800, 115200, 187500 <sup>*6</sup> bps |                     |                                     |                     |                                     |                     |
|                     | Ethernet                               | 100BASE-TX<br>/10BASE-T<br>Built-in                                                                                                                                                                           | Option<br>(CU-03-3) | 100BASE-TX<br>/10BASE-T<br>Built-in | Option<br>(CU-03-3) | 100BASE-TX<br>/10BASE-T<br>Built-in | Option<br>(CU-03-3) |
|                     | Communication I/F                      | Equipped                                                                                                                                                                                                      |                     |                                     |                     |                                     |                     |
|                     | CF card I/F                            | Equipped <sup>*4</sup>                                                                                                                                                                                        |                     |                                     |                     |                                     |                     |
|                     | USB I/F                                | Type A and B(Ver1.1)                                                                                                                                                                                          |                     |                                     |                     |                                     |                     |
| Options             | Communication unit                     | CU-00 ~ 08                                                                                                                                                                                                    |                     |                                     |                     |                                     |                     |
|                     | I/O unit                               | V-I/O                                                                                                                                                                                                         |                     |                                     |                     |                                     |                     |
| Compatibility       | CE Marking                             | EN61000-6-2, EN61000-6-4                                                                                                                                                                                      |                     |                                     |                     |                                     |                     |
|                     | UL/cUL                                 | UL508/UL1604                                                                                                                                                                                                  |                     |                                     |                     |                                     |                     |
|                     | RoHS directive                         | Complied                                                                                                                                                                                                      |                     |                                     |                     |                                     |                     |

<sup>\*3</sup> Under development  
<sup>\*4</sup> Available only when equipped with DU-10 (option)  
<sup>\*5</sup> MJ2 is connectable with RS-422 (4-wire)  
<sup>\*6</sup> Available only when connected with SIEMENS MPI (MJ2 only). Not compatible with D-Sub 9-pin (option)

Legend of icons

|                                                                                                                       |                                                                                                                                                                                        |                                                                                                        |                                                                                                    |                                                                                                   |                                                                                                   |                                                                                                   |                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
|  12.1 inches Display size (inches) |   Display device |  Display resolution |  Display colors |  FROM capacity |  SRAM (byte) |  Serial port |  Ethernet 100BASE-TX/10BASE-T |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|

# V808CH series

Pendant type model in V8 series

7.5-inch model 

Handy type model supporting Ethernet



With Ethernet port

**V808iCH**   

Without Ethernet port

**V808CH**  

**V808CH models**  
V808  CH 

|   | Key switch | Deadman switch |                 |
|---|------------|----------------|-----------------|
|   |            | Switch type    | External output |
| 0 | Unequipped | Momentary      | Unequipped      |
| 1 | Equipped   | Momentary      | Unequipped      |
| 2 | Unequipped | 3-position     | 1 contact       |
| 3 | Equipped   | 3-position     | 1 contact       |
| 4 | Unequipped | 3-position     | 2 contacts      |

[Functional specifications]  
N/A: Without built-in LAN port i: With built-in LAN port



CF Card I/F



**TB3**

- RS-422/485
- Key switch output
- Emergency stop switch output
- Deadman switch output

**USB-B**

**TB2**

- RS-232C
- External output (4-point)

**Ethernet**



**TB1**  
power supply  
(DC24V)

| Model                                |                             | V808iCHx                                                    | V808CHx                                                                                              |
|--------------------------------------|-----------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Display size                         |                             | 7.5 inches                                                  |                                                                                                      |
| Display device                       |                             | TFT color LCD                                               |                                                                                                      |
| Resolution                           |                             | 640×480 dots                                                |                                                                                                      |
| Display colors                       |                             | 65,536 colors(without blinks) / 32,768 colors(with blinks)  |                                                                                                      |
| Display memory                       |                             | FROM (12.5MB)                                               | FROM (4.5MB)                                                                                         |
| Backup memory                        |                             | SRAM (512KB)                                                | SRAM (128KB)                                                                                         |
| Clock                                |                             | Equipped                                                    |                                                                                                      |
| Ethernet                             |                             | 100BASE-TX / 10BASE-T Built-in                              | Unequipped                                                                                           |
| CF card I/F                          |                             | Equipped                                                    |                                                                                                      |
| USB I/F                              |                             | Type B (Ver1.1)                                             |                                                                                                      |
| Function switch specifications       | Number of function switches | 12 switches (4: External output)                            |                                                                                                      |
|                                      | Switch type                 | Membrane switch                                             |                                                                                                      |
|                                      | Mechanical life             | 1 million times or more                                     |                                                                                                      |
| Emergency stop switch specifications | Switch type                 | Push lock type (b-contact point, 2 circuits)                |                                                                                                      |
|                                      | Mechanical life             | More than 100,000 times                                     |                                                                                                      |
|                                      | Rated voltage               | DC24V                                                       |                                                                                                      |
| Key switch specifications            | Rated current               | 1A (load resistance)                                        |                                                                                                      |
|                                      | Contact point               | a-contact point, 1 circuit                                  |                                                                                                      |
|                                      | Mechanical life             | More than 250,000 times                                     |                                                                                                      |
| Deadman switch specifications        | Electrical life             | More than 100,000 times (switching frequency 1,200 times/h) |                                                                                                      |
|                                      | 3-position                  | Switch type                                                 | 3-position output (a-contact point, 2 circuit*1)                                                     |
|                                      |                             | Mechanical life                                             | Off → On 1 million times or more                                                                     |
|                                      |                             | Rated voltage                                               | Off → On → Off (direct open-circuit) more than 100,000 times                                         |
| External I/F                         | TB2                         | Rated current                                               | DC24V                                                                                                |
|                                      |                             | Switch type                                                 | 1A (load resistance)                                                                                 |
|                                      |                             | Mechanical life                                             | Momentary                                                                                            |
| Compatibility                        | TB3                         | Switch type                                                 | 1 million times or more                                                                              |
|                                      |                             | Mechanical life                                             |                                                                                                      |
|                                      |                             | Rated current                                               |                                                                                                      |
| Option List                          | TB2                         | Switch type                                                 | RS-232C, Asynchronous                                                                                |
|                                      |                             | Mechanical life                                             | Data length: 7 bits, 8 bits Parity: even, odd, none                                                  |
|                                      |                             | Rated current                                               | Stop bit: 1 bit, 2 bits, Baud rate: 4800, 9600, 19200, 38400, 76800, 115200bps                       |
| Customer Service                     | TB3                         | Switch type                                                 | RS-422/485, Asynchronous                                                                             |
|                                      |                             | Mechanical life                                             | Data length: 7 bits, 8 bits, Parity: even, odd, none                                                 |
|                                      |                             | Rated current                                               | Stop bit: 1 bit, 2 bits, Baud rate: 4800, 9600, 19200, 38400, 76800, 115200, 187500 <sup>2</sup> bps |
| Product Warranty                     | CE Marking                  | Switch type                                                 | EN61000-6-2, EN61000-6-4                                                                             |
|                                      |                             | Mechanical life                                             | UL508                                                                                                |
|                                      |                             | Rated current                                               | Complied                                                                                             |

\*1 a-contact point and 2 circuits are available only in V808(i)CH4. Only one circuit is available in V808(i)CH2 and V808(i)CH3.

\*2 When connected with SIEMENS MPI

|                                        |
|----------------------------------------|
| Products                               |
| Display/<br>Operation<br>Features      |
| Communication<br>Features              |
| Expandability                          |
| Usability                              |
| Configuration<br>Software (V-SFT)      |
| Component<br>Parts                     |
| Expandability<br>with MES/<br>Ethernet |
| Specifications                         |
| Dimensions and<br>Part Names           |
| System<br>Configuration                |
| Option                                 |
| Option List                            |
| Customer Service                       |
| Product Warranty                       |

Display Features

Improved visibility for operator interface panels

Great power of the visibility facilitates the operation by high-resolution and high-speed video display.

High-resolution Display

65,536 colors\*1  
(32,768 colors with blinks)

High-resolution display of 65,536 colors without blinks and 32,768 colors with blinks enables clear display of JPG and BMP images. Realistic appearance of photos, illustrations and 3D parts improves visibility and makes it easy for operators to quickly grasp the conditions.



The image shown below is not an actual display image.

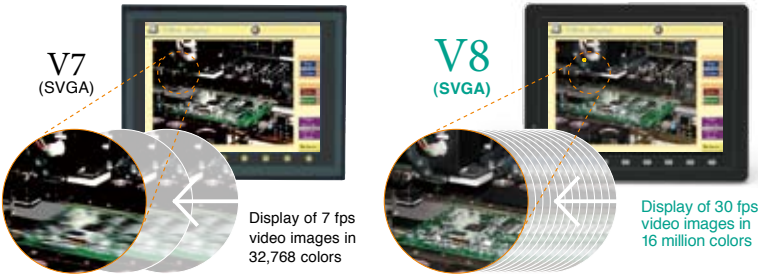
\*1 Except V806iMD/V806MD

High-level images are displayed in real time without missing any information

Display of 30 fps video images in 16 million colors\*2

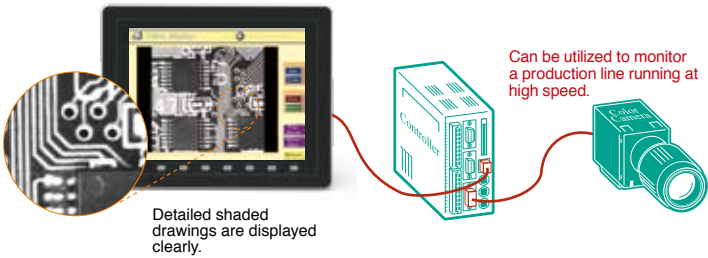
First in Industry

High-speed displaying of 30 frames per second is possible. Even displays for production of a short tact time can be made without any delay.



Monochrome display with 256 gradations\*2

Monochrome images that are often used by image processor can be displayed more clearly. The reproduction capacity for gradation and pattern-indented surfaces has been drastically improved.



\*2 For V808iS, 260,000-color displays and 64-gradation monochrome displays are possible.

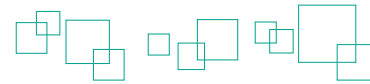
Clear and smooth letters

The stroke font can be displayed to appear smooth even for magnified characters.

The stroke font is defined by lines. Since it does not depend on the resolution of the device, which is different from the bitmap font, fonts can be magnified or shrunk freely. Unicode enables you to edit the project in various languages.

| Language    |            | Japanese                           | English/<br>European | Traditional<br>Chinese | Simplified<br>Chinese | Korean | Central<br>European | Cyrillic | Greek | Turkish | Unicode(UTF-8) |
|-------------|------------|------------------------------------|----------------------|------------------------|-----------------------|--------|---------------------|----------|-------|---------|----------------|
| Bitmap font | Non-gothic | ●<br>Japanese/Japanese32           | ●                    | ●                      | ●                     | ●      | ●                   | ●        | ●     | ●       | ●              |
|             | Gothic     | ●<br>Gothic/Gothic (IBM extension) | ●<br>Gothic (Mincho) | ×                      | ×                     | ×      | ×                   | ×        | ×     | ×       | ×              |
| Stroke font |            | ●                                  | ●                    | ●                      | ●                     | ●      | ●                   | ●        | ●     | ●       |                |





## Operation Features

### "User-oriented operability" by high-speed and smooth display

High-speed accelerator and algorithm ensure stress-free operation.

### Free switch layout with analog resistive switches

#### Analog resistive switch

Analog resistive switches are used for MONITOUCH. Freer switch layout facilitates screen designing while more intensive operation display can be produced.



#### Matrix resistive switch

Switches are detected by block.



When moving the button

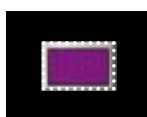


The button can be arranged only along the specified grid line



#### Analog resistive switch

Switches are detected by dot.



When moving the button

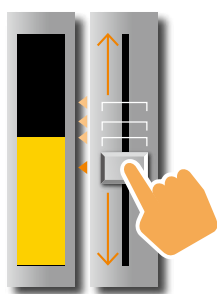


The switch detection area can be moved freely along with the button

\*The area outside the dotted lines is not detected.

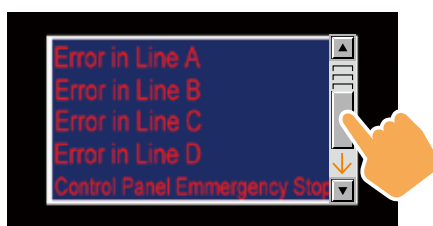
#### Slider switch

Slider switches enable data entry without inputting data using the numeral key pad. Values can be modified easily and quickly, even for a fine adjustment.



#### Scroll bar

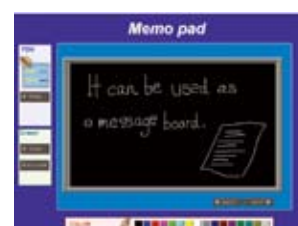
Messages and JPEG files out of the display area can be seen by scrolling the area.



\*Scrolling direction varies depending on functions

#### Memo pad function

Analog resistive switches allow you to use MONITOUCH as a memo pad for hand writing. You can draw a picture or write a message on the display for use as a message board at production sites.



### High-speed accelerator and algorithm ensure speedy, high-quality displays as well as higher usability in panel operation.

V8 series has drastically improved the processing capacity for drawing, calculation and communication in terms of smooth drawing and quick response.

#### Speedy drawing

V8 is equipped with a high-speed graphic accelerator, which improves speed for drawing graphics and characters.

#### High-speed communication

High-speed communication with PLCs is possible. By improving communication efficiency, the cycle speed can be shortened even when linked with more than two PLCs.

#### Quick response

Switch response speed has been shortened by efficient data processing and task assignment.

## Communication Features

### Multi-communication using the gateway function

Is capable of the connection with up to eight devices by combining Ethernet and serial communication. More advanced and expanded network can be now realized.

Connectable with up to eight different kinds of devices and different manufacturers' PLCs

### 8-way communication

A combination of Ethernet (eight protocols) and serial communication (three protocols) allows the 8-way communication, which enables connection among a V8 and up to eight kinds of devices consisting of PLCs and peripherals of different manufacturers.

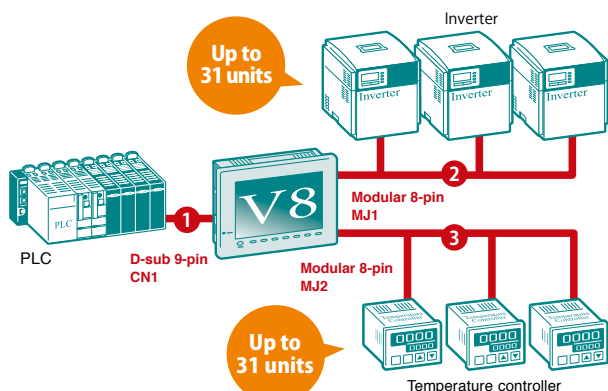
- Simultaneous communication and data transfer with eight kinds of devices
- Simultaneous monitoring and operation of multiple PLCs and peripherals
- Linkage between a V8 and various devices on the LAN network using the gateway function

## Network Examples

### Example 1 Serial connection (three ports)

#### Making a network linked with various automation devices

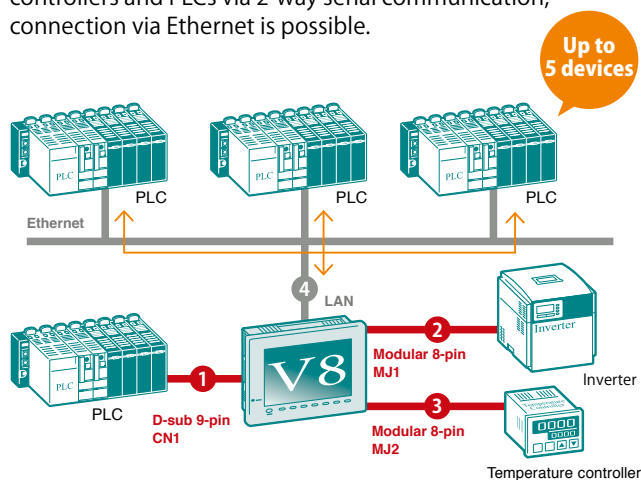
PLCs and peripherals of up to three kinds of units can be connected by serial connection. Even though two or more types of temperature controllers and inverters are used, they can be connected with one V8.



### Example 2 Serial connection and Ethernet

#### Integrated management of up to eight kinds of devices

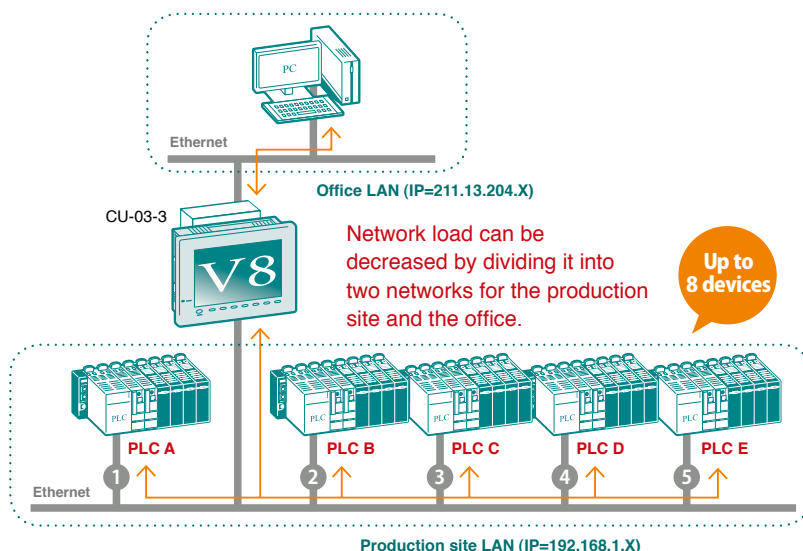
In addition to conventional connection with temperature controllers and PLCs via 2-way serial communication, connection via Ethernet is possible.

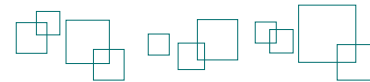


### Example 3 Ethernet First in Industry

#### Used as a gateway for different types of networks

V8 can connect with eight kinds of PLCs via Ethernet. In addition, it can be used as a gateway with another network by adding an Ethernet port using the optional unit (CU-03-3). For example, data can be transferred between a production site and the office freely by using a V8. V8 works as the gateway of multiple networks of the production site and the office without increasing data load on the networks.





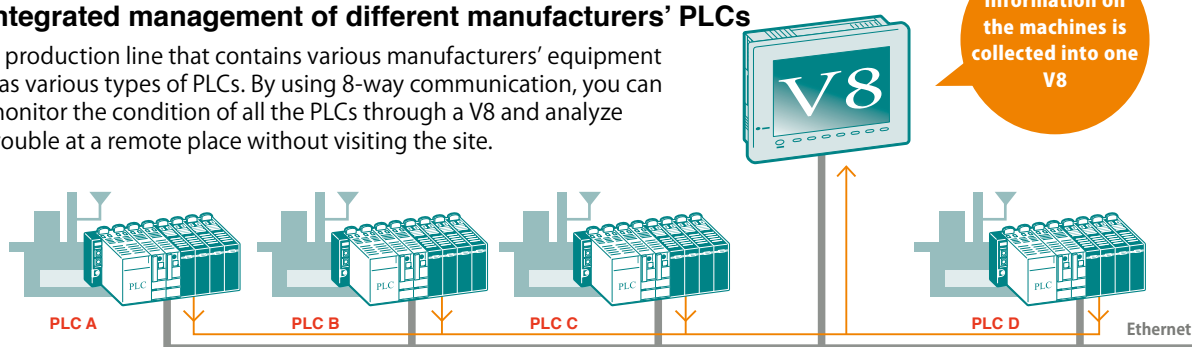
## A variety of ingenious uses

### 8-way communication offers various functions and boosts your convenience

#### case 1 Analysis of trouble

##### Integrated management of different manufacturers' PLCs

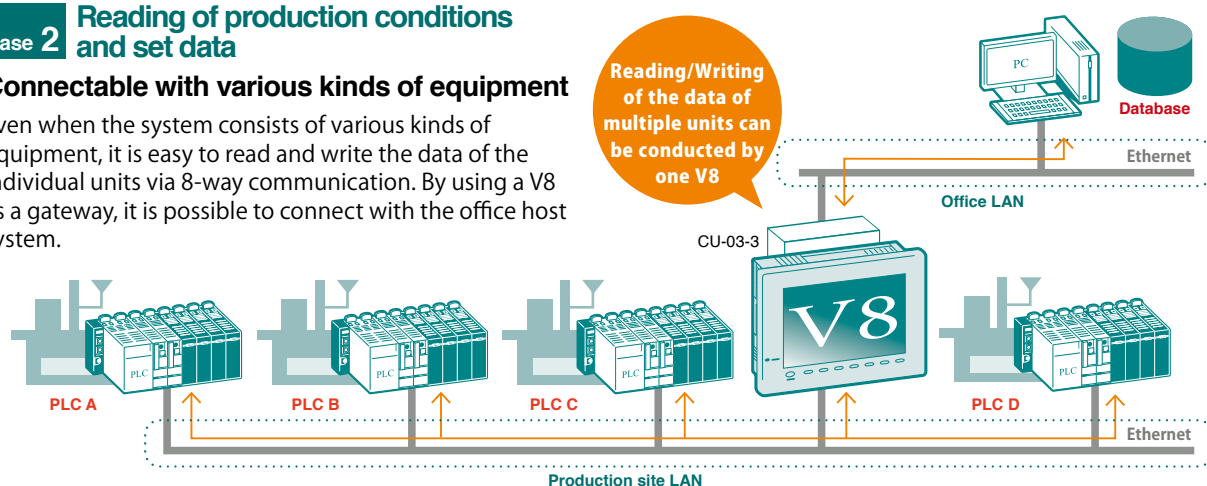
A production line that contains various manufacturers' equipment has various types of PLCs. By using 8-way communication, you can monitor the condition of all the PLCs through a V8 and analyze trouble at a remote place without visiting the site.



#### case 2 Reading of production conditions and set data

##### Connectable with various kinds of equipment

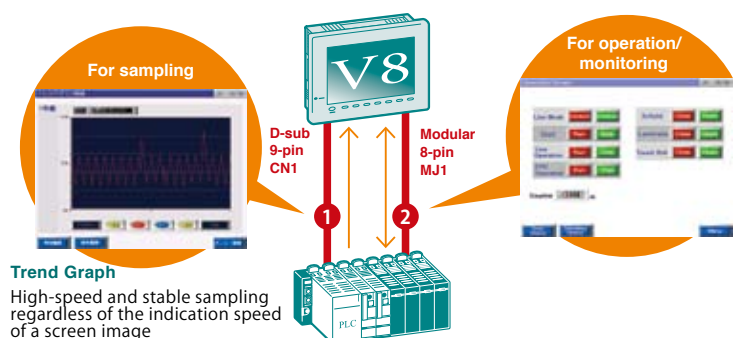
Even when the system consists of various kinds of equipment, it is easy to read and write the data of the individual units via 8-way communication. By using a V8 as a gateway, it is possible to connect with the office host system.



#### case 3 Real-time indication of information

##### High-speed data sampling

A V8 is connected to a PLC via two communication lines: one for operation/monitoring, and the other for sampling, a setup that enables high-speed and stable sampling.



|                                        |
|----------------------------------------|
| Products                               |
| Display/<br>Operation<br>Features      |
| Communication<br>Features              |
| Expandability                          |
| Usability                              |
| Configuration<br>Software (V-SFT)      |
| Component<br>Parts                     |
| Expandability<br>with MES/<br>Ethernet |
| Specifications                         |
| Dimensions and<br>Part Names           |
| System<br>Configuration                |
| Option                                 |
| Option List                            |
| Customer Service                       |
| Product Warranty                       |

Expandability (USB master/slave)

High compatibility with peripherals makes for more user-friendliness

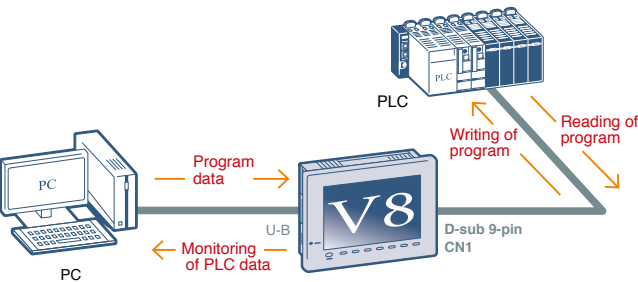
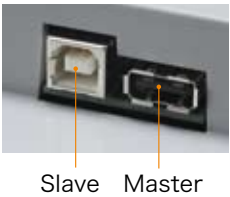
All models are equipped with two types of USB interfaces fitted as standard feature.

High-speed transfer of large-volume data and easy connection to printers

Slave (USB-B)

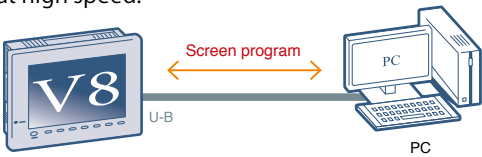
PLC Ladder Program Transfer

PLC ladder programs can be written or monitored with your PC through the USB port of V8. High-speed ladder transfer is possible.



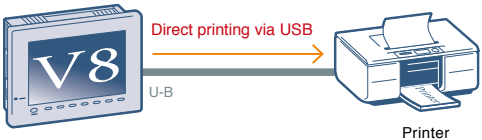
High-speed Transfer of Screen Program

Large-volume screen program edited by "V-SFT" configuration software can be downloaded and uploaded at high speed.



Compatible with PictBridge Printers

V8 is compatible with PictBridge printers. With PictBridge-compatible printers, production data such as daily and monthly reports can be printed out easily.

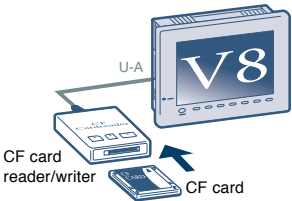


Compatible with PC peripherals including a USB keyboard and a USB mouse

Master (USB-A)

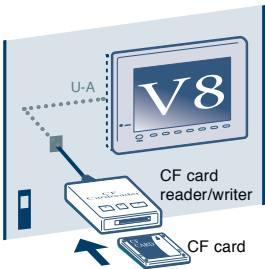
Card Reader/Writer

Connection with our "USB-CFREC" or commercial CF card readers/writers increases the versatility.



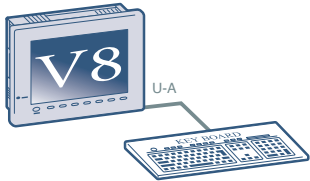
USB Interfaces Fitted on the Front

Optional interfaces "UA-FR" and "UB-FR" enable USB ports to be fitted on the front of the display for easy access.



Compatible with USB Keyboard

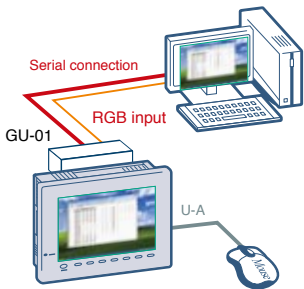
In addition to conventional software keyboards, a USB keyboard can be connected, which facilitates the entry of long product numbers and code numbers.



Compatible with USB Mouse

PC operation

By installing an optional RGB input unit "GU-01", "GU-10" or "GU-11", PC screen can be displayed on V8. You can operate the PC screen using a USB mouse.



Output on Large Displays

By installing the optional RGB output unit "GU-02", V8 screen program can be displayed on a large screen and it can be operated using a USB mouse.



# Expandability (CF Card)

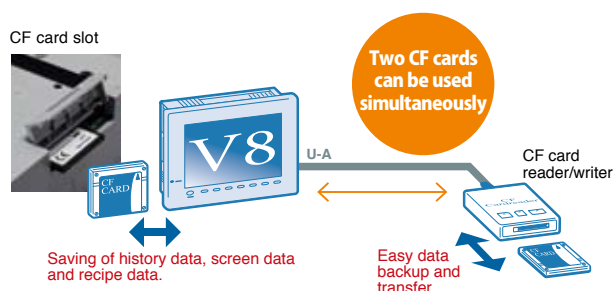
## For superior information management

Two-drive system for versatile uses of CF cards

### CF card interface and USB reader/writer

#### Equipped with Two Drives

In addition to the built-in CF card interface, MONITOUCH is equipped with a USB interface for a CF card reader/writer, which can be used simultaneously. Since CF card data can be copied to another card while V8 is being used, the V8 performance will not be inhibited. These functions expand the versatility of MONITOUCH.



#### Built-in Drive for Constant Use

##### case 1 Recipe Data

Production conditions can be saved in a CF card in CSV format. For preparation of production, data can be read out from a CF card and written in the PLC. It is also possible to read out data from PLC.



##### case 2 Sampling

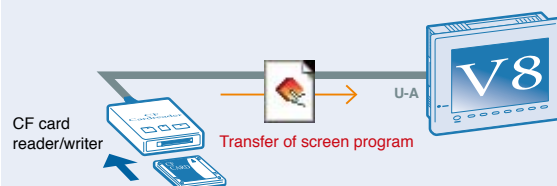
Production data and alarm history can be sampled and saved. Since the data is saved in CSV format, it can be easily edited in Excel.



#### USB Drive for Easy Data Delivery

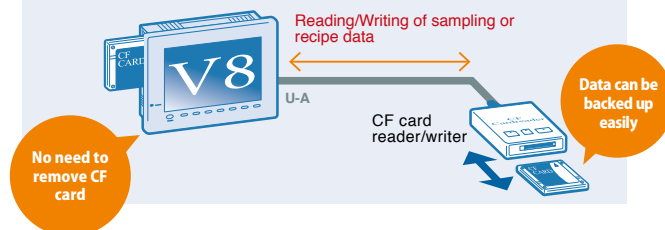
##### case 3 Screen Program Transfer

Because screen data can be saved on a CF card and read into V8 at a production site by means of a CF card reader/writer, there is no need to bring your PC.



##### case 4 Data Transfer

While using a CF card as a built-in drive, the card data can be copied to another CF card via the USB interface. Sampling data and recipe data can be backed up easily while keeping the CF card in the slot.



### PC-friendliness

#### Compatible with FAT32

FAT has some limitations. For example, a file name cannot exceed eight characters in length, and extensions must be within three characters. FAT32 allows a data file to have a longer file name, which improves compatibility with PCs.

### Impressive Screen

#### Screen program capacity can be increased by means of a CF card

A CF card can be used as an extension unit for editing the screen. You can design an impressive screen freely without having to worry about data capacity.

|                                        |
|----------------------------------------|
| Products                               |
| Display/<br>Operation<br>Features      |
| Communication<br>Features              |
| Expandability                          |
| Usability                              |
| Configuration<br>Software (V-SFT)      |
| Component<br>Parts                     |
| Expandability<br>with MES/<br>Ethernet |
| Specifications                         |
| Dimensions and<br>Part Names           |
| System<br>Configuration                |
| Option                                 |
| Option List                            |
| Customer Service                       |
| Product Warranty                       |

Easy Configuration 1

Highly functional switches

Switches with various functions are standardized. No macro or PLC ladder programming is required.

Various switches that meet the individual needs

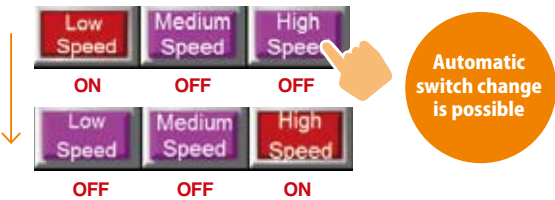
Multi-output

In order to meet diversified needs, switches with various functions are installed.

Multi-output memory  
Output up to 16 positions

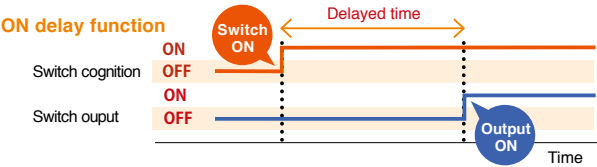
Switches have a multi-output function. Turning on just one switch makes the other switches turn off. It is also possible to output bit signals up to 16 positions.

For example, when you turn on one switch, the others turn off simultaneously.



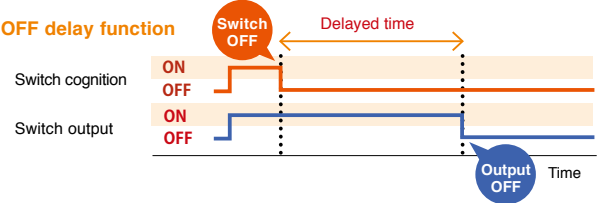
Setting the switch timing freely  
ON delay

It is possible to set switch functions such as requiring holding down the button for a certain time. This function prevents a false operation of the switch.



Setting the switch timing freely  
OFF delay

Switch output is retained for a certain time after reset of the switch.



Indication depends on the value

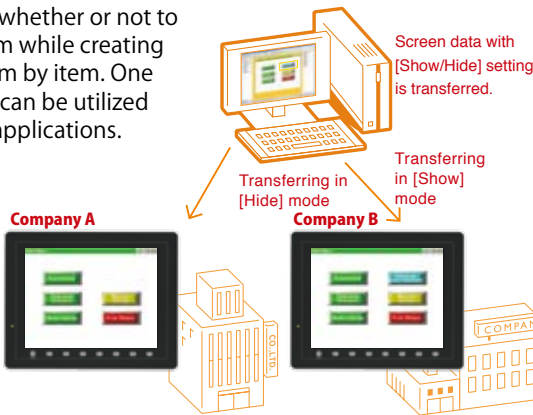
In addition to the bit ON/OFF status, it is possible to set various switch conditions according to the value.



Indication according to individual production sites needs

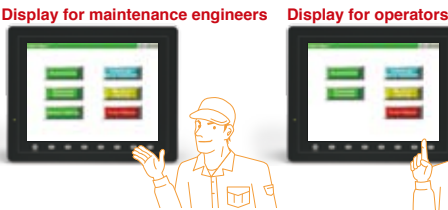
Conditional Visibility  
Static conditional visibility

You can set whether or not to show an item while creating a screen, item by item. One screen data can be utilized for different applications.



Conditional visibility according to the security level

The display can be arranged according to security level. The security level is controlled by passwords. For example, different displays are shown for a maintenance engineer and an operator.



Dynamic conditional visibility

Whether items are indicated or not is automatically determined according to the memory condition.

## Easy Configuration 2

### Convenient functions to meet users' demands

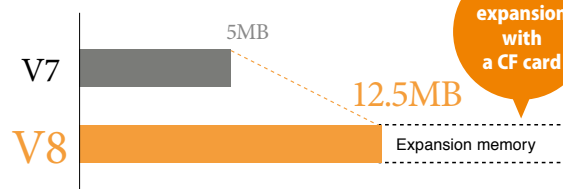
Flash ROM, a large capacity of SRAM and many other functions for more user friendliness

#### High-capacity memory facilitates screen design

##### 12.5MB<sup>\*1</sup> Flash ROM

V8 has 12.5MB<sup>\*1</sup> Flash ROM as standard — twice<sup>\*2</sup> the capacity of our previous model. In addition, by saving data in a CF card, you can design the screen without caring memory capacity.

<sup>\*1</sup> SRAM capacity differs depending on the models. See Performance Specifications (P29) for details  
<sup>\*2</sup> Comparison with V7

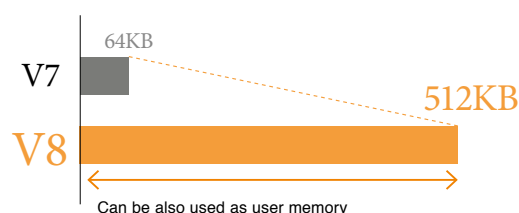


#### For saving large-volume event history data

##### 512KB<sup>\*1</sup> SRAM as Standard

The built-in SRAM capacity has been expanded to 512KB<sup>\*1</sup> — eight times larger than that of our previous model. The capacity for backup of sampling data, operation information, alarm information, etc. has been greatly increased to comply with the ISO standard for information management. The large memory capacity enables quick data processing.

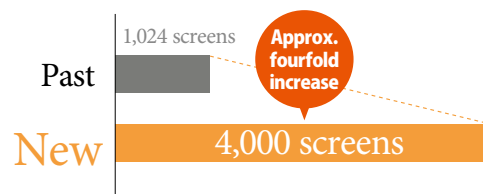
<sup>\*1</sup> SRAM capacity differs depending on the models. See Performance Specifications (P29) for details



#### Extended screen number

##### Enhanced configuration function

The upper limit of the number of configurable screens is extended to 9,999. Up to 4,000 screens can be stored in a V8. Additionally they can be saved in CF card, which means you do not need to care about screen data capacity.



#### Easy-to-make pop-up message

##### Pop-up Window

Pop-up window is standardised. No programming or individual message edit is required for making a dialog such as an alert.



Displaying a pop-up window



Switches are operative only when "OK" is pressed

|                                        |
|----------------------------------------|
| Products                               |
| Display/<br>Operation<br>Features      |
| Communication<br>Features              |
| Expandability                          |
| Usability                              |
| Configuration<br>Software (V-SFT)      |
| Component<br>Parts                     |
| Expandability<br>with MCS/<br>Ethernet |
| Specifications                         |
| Dimensions and<br>Part Names           |
| System<br>Configuration                |
| Option                                 |
| Option List                            |
| Customer Service                       |
| Product Warranty                       |

Easy Configuration 3

Enhanced interface led by the most connections in the industry

Alarm enhancement

Both a message and a parameter are loaded and displayed on the screen when any alarm happens. For example, if the water temperature gets more than 100°F, not only "caution" alarm but temperature data like "100°F! Caution" can be displayed on the screen. It is facilitated to analyze causes of failure by more detailed information.

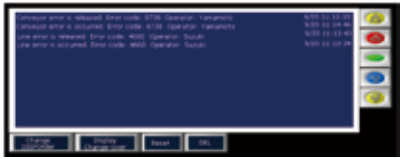
Setting image

Parameter table

Up to 8 parameters can be registered and associated with each alarm.

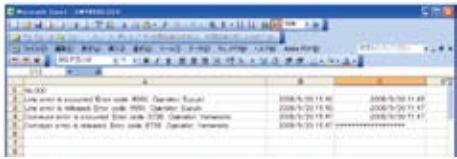
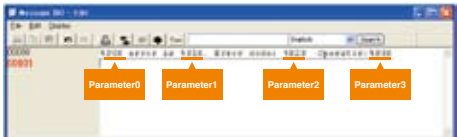
| No. | Memory | Type                       |
|-----|--------|----------------------------|
| 0   | D4     | Message No.                |
| 1   | M0     | Bit                        |
| 2   | D5     | Numerical value (one word) |
| 3   | D6     | Characters (8 characters)  |
| .   | .      | .                          |
| .   | .      | .                          |
| .   | .      | .                          |

A parameter is loaded and a message that is corresponding to the situation is displayed when an alarm happens.



Message editing

Describe a parameter number that is registered when you edit a message. Then the memory that is set in the parameter is loaded and displayed when this message is displayed.



Displayed content can be saved in CF card as CSV formatted file, which makes it easier to analyze causes of failure.

Operation log

Operations such as pushing buttons on the screen and entering numbers are recorded in chronological order. By combining it with the password function, you can view "Who, When, What, & How" history to analyze causes of failure.

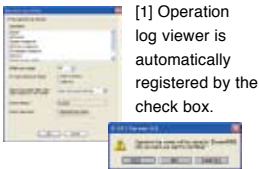


Operation history is saved as a binary file. You do not have to be worried about falsification of data.

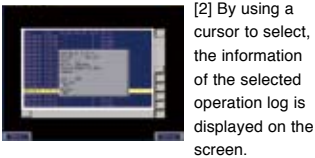
| Items                  | Timing to save                                                         |
|------------------------|------------------------------------------------------------------------|
| Start                  | When turning on power                                                  |
| Transfer               | During the transfer time of screen data or I/F driver                  |
| Mode switching         | When switching between RUN screen and Main Menu screen                 |
| Screen switching       | When switching screens                                                 |
| Language switching     | When switching languages                                               |
| Switch operation       | When pushing on the switch                                             |
| Data display updating* | When changing Number display/String display depending upon input modes |
| Log discarding         | When clearing SRAM data and save a new log                             |

\*Tabla Data Display is not supported.

By easy installation of checking "registration of operation log viewer", all functions of the viewer can be used.



[1] Operation log viewer is automatically registered by the check box.



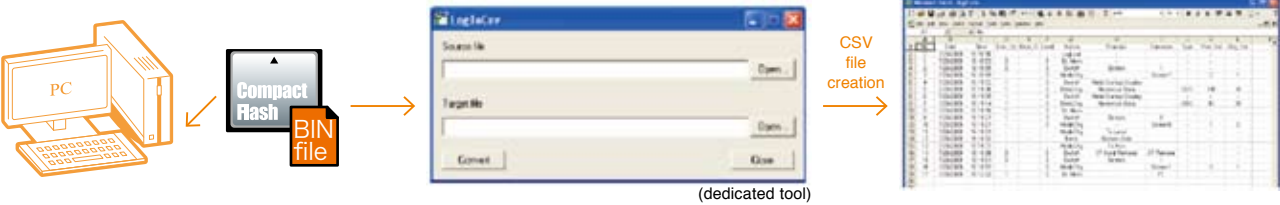
[2] By using a cursor to select, the information of the selected operation log is displayed on the screen.



[3] Setting such as Display/Hide of items and number of characters can be customized as you like.

CSV conversion

The binary file of operation history which was saved in a CF card can be converted to a CSV file by using a dedicated tool.





## Easy Configuration 4

### Multi-link 2 Ethernet function

#### Conditional visibility of trend sampling data

You can select a waveform of trend sampling and display/ hide it.



Screen sharing is achieved as the waveform that is appropriate for the machine specifications can be selected.

#### Supporting portrait orientation

You can edit V806 series screen as a longitudinal type image.



This function is the most appropriate for the machine without enough horizontal spaces.

Note) Not available with monochrome type.

#### Function security

Security levels from 0 to 15 can be set per screen. By setting function limit appropriate for each user, highly secured environment can be established.



Screen 2 (Level 3)



On the moving to Screen 5



Password input screen is automatically displayed.

Users higher than Screen 5



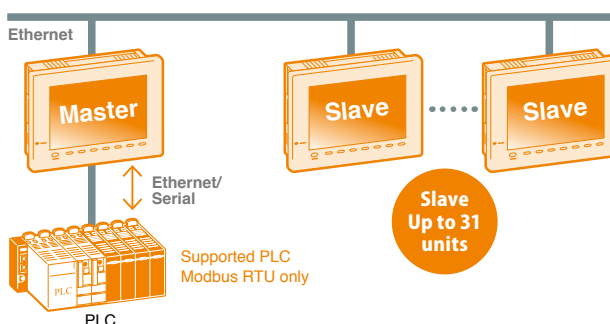
Screen 5 (Level 5)

#### Interlock of the switch

Security levels can be set in the switches as well. Only those who login with an appropriate levels can use the switches.

#### Multi-link 2 via Ethernet

Multi-link 2 connection via Ethernet is supported. When connecting multiple V8s to one PLC, much faster transferring can be achieved comparing to existing multi-link.



#### Added macros

##### Mathematics/trigonometric function macros

Commands regarding to trigonometric function such as sine (SIN), cosine (COS) and tangent (TAN), absolute value and sign inversion are added.

##### CF card (sampling) macros

You can save a sampling data of buffering area in any file name as a CSV file.

##### Control statement macros

"IF ~ ELSE" statement is supported. You can write shortly and easily condition comparison macros.

##### CF card (hard copy) macros

You can save an image on the screen in any file name.

## Configuration Software [V-SFT]

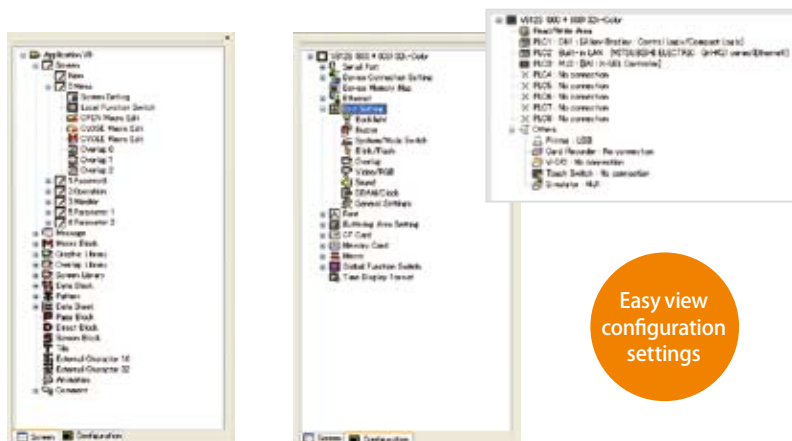
## New V-SFT for easy screen configuration

Multiple windows provides immediate access to all application data.

### Overall View of All the Devices

#### Project View (1)

- System tree diagrams show the configuration of files and screens in the entire system.
- Easy viewing and modification of the contents and configuration of each block.



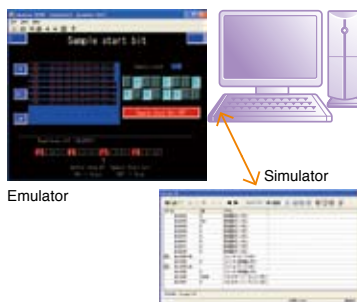
Easy view configuration settings

[Screen] and [Configuration] windows are easily switched by clicking tabs.

### Quick Debugging on Your PC

#### Emulation function for Easy Debugging

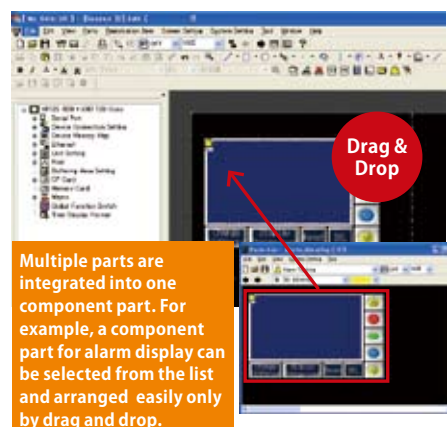
With the emulator of V-SFT Ver.5, data debugging is possible on your PC without V8 or PLC.



### Quick Arrangement with Component Parts

#### Parts View (2)

- Various parts are listed for each item.
- Select a part, and drag & drop it on the configuration window.



Multiple parts are integrated into one component part. For example, a component part for alarm display can be selected from the list and arranged easily only by drag and drop.

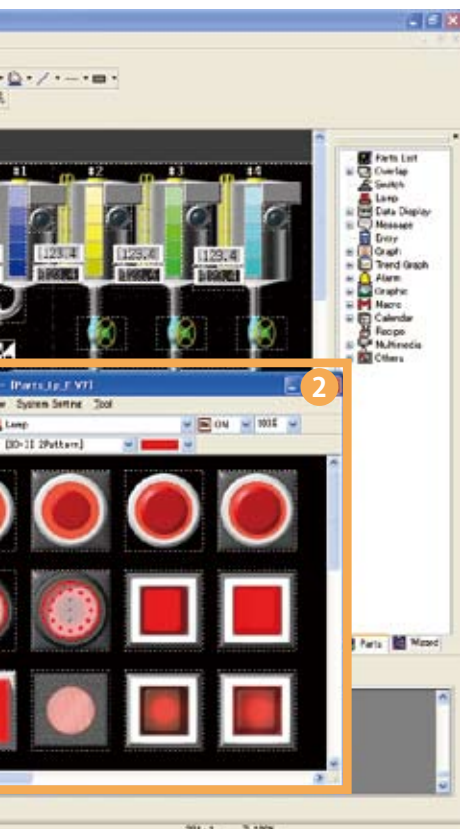
## MONITOUCH V-SFT Ver. 5

#### V-SFT Requirements

|                   |                                                                              |
|-------------------|------------------------------------------------------------------------------|
| PC                | PC/AT compatible machine with Windows                                        |
| OS                | Windows 98/ Me/ NT Version 4.0/ 2000/ XP/ XP 64 edition/ Vista 32bit*        |
| CPU               | Pentium III 800 MHz or higher (Pentium IV 2.0 GHz or higher is recommended.) |
| Memory            | 512 MB or more                                                               |
| Hard disk         | For installation: 850 MB or more available space                             |
| CD-ROM Disk drive | 24 times or faster                                                           |
| Display           | Resolution of 1,024 × 800 (XGA) or higher                                    |
| Color indication  | High color (16 bit) or higher                                                |

\* When installing in Windows NT Ver.4/ 2000/ XP/ XP 64 edition/ Vista 32bit, administrator authority is required.





## Easy and Speedy Display Configuration

### Auto Size Change

When using screen data from a panel with different screen resolution, screen size is automatically adjusted to your selected model.



VGA (640x480 pixels)



Switched to V812IS  
SVGA (800x600 pixels)



Size Change

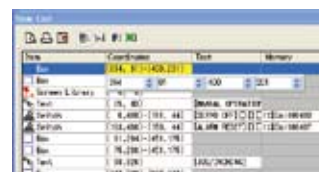
Since the screen size is automatically adjusted, no modification for arrangement is required.

### Convenient Item View (3)

#### Direct editing

Memory condition, coordinates, switch names can be entered in the item view.

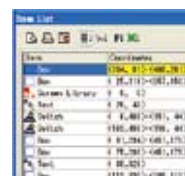
Memory address, position, and text can be directly entered in the item list.



Easy editing by selecting items

### Coordinate items view

Utilize [Display setting] in the item list to minimize or maximize item properties in the windows. This system facilitates efficient management of information.



## Enhanced Batch Change Functions

### Additional items for batch change

More items can be changed simultaneously by batch change.



Select items to change, and select [Batch change] with a right click of the mouse.



### Batch change with the item view (4)

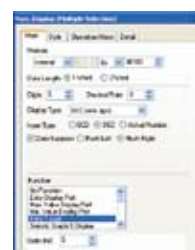
Multiple items can be selected to change the setting simultaneously on the item view window.

<Available items>

Switches, lamps, values, characters, messages, bar/circle graphs, panel meters, closed-area/statistical graphs



Select items to change, and select [Detailed setting].



|                                 |
|---------------------------------|
| Products                        |
| Display/Operation Features      |
| Communication Features          |
| Expandability                   |
| Usability                       |
| Configuration Software (V-SFT)  |
| Component Parts                 |
| Expandability with MES/Ethernet |
| Specifications                  |
| Dimensions and Part Names       |
| System Configuration            |
| Option                          |
| Option List                     |
| Customer Service                |
| Product Warranty                |

## Component Parts

“Component Parts” facilitate screen configuration.

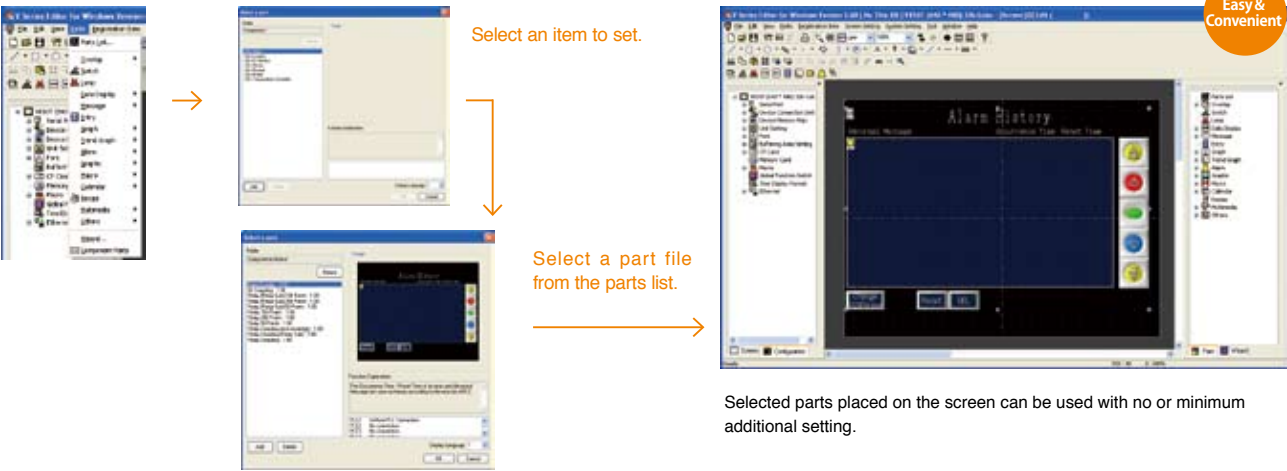
Convenient tool assists you in creating functional screens instantly.

### Quick screen configuration using integrated “Component Parts”

#### Component Parts

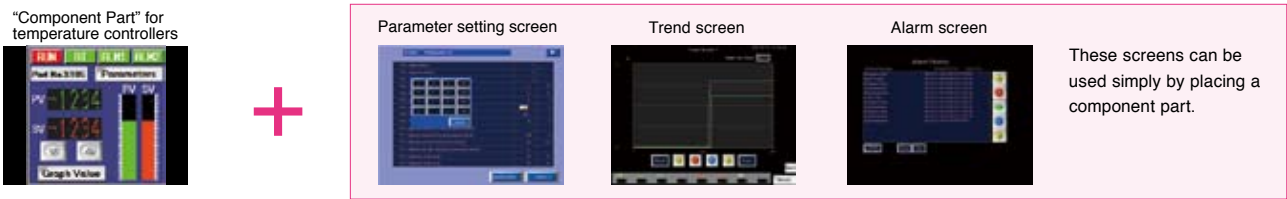
First in Industry

In “Component Parts,” various functions and macros have been arranged according to purpose. You can create a functional screen instantly by simply selecting a “Component Parts” from the parts list and placing it on the screen.



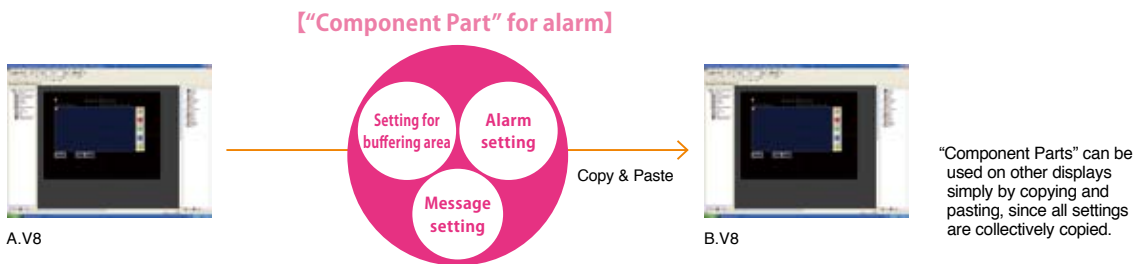
#### Point 1 Easy Screen Configuration

You can create multifunctional screens using integrated “Component Parts.” When arranging on a screen that contains other messages or setting windows, a “Component Part” can be used regardless of overlapping of settings or windows.

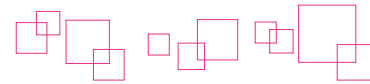


#### Point 2 Easy Utilization of Resource

“Component Parts” contain all necessary settings for operation, so they don’t need any additional settings when used on other displays. They can be reused simply by copying and pasting.







### Point 3 Simple Setting View

After placing "Component Parts," they can be easily used simply by setting addresses and texts.

#### Example of Setting View ("Component Part" for alarm history)



Example of Setting View ("Component Part" for alarm history)  
Set an address for alarm monitoring.

Memory setting



Set a text for each alarm message.

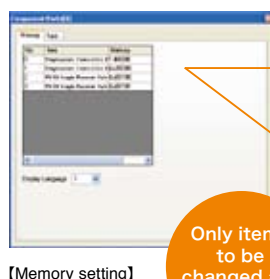
Text setting

Easy and simple

All settings for alarm history can be edited in one menu.

### Point 4 Batch Change of Addresses/Texts

When the same address or text is used for multiple screens, all the settings can be changed simultaneously on the setting view simply by registering it in the address/text table of a "Component Part."



[Memory setting]

Only items to be changed are listed.



Screen 1

Screen 2

### Point 5 Authorization by Passwords

Setting a password for a "Component Part" prevents the settings for the part from being changed by unauthorized persons. Customers can use a "Component Part" without having to worry about tampering of the setting.



No worry about tampering

### Point 6 Various "Component Parts"

"Component Parts" with various functions are available. They can be selected from the parts list according to your purpose to configure displays promptly.

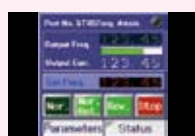
#### Examples of "Component Parts"

##### Temperature controller



Displays for monitoring and parameter setting of temperature controllers can be made easily.

##### Inverter



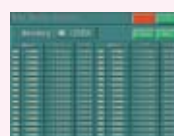
Displays for monitoring and parameter setting of inverters can be made easily.

##### Robot controller



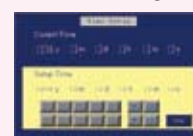
Displays for monitoring and operation setting of robots can be made easily.

##### I/O monitor



Displays for I/O monitoring of PLCs can be made easily.

##### Date setting



Displays for date setting can be made easily.



|                                   |
|-----------------------------------|
| Products                          |
| Display/Operation Features        |
| Communication Features            |
| Expandability                     |
| Usability                         |
| Configuration Software (V-Server) |
| Component Parts                   |
| Expandability with MES/Ethernet   |
| Specifications                    |
| Dimensions and Part Names         |
| System Configuration              |
| Option                            |
| Option List                       |
| Customer Service                  |
| Product Warranty                  |

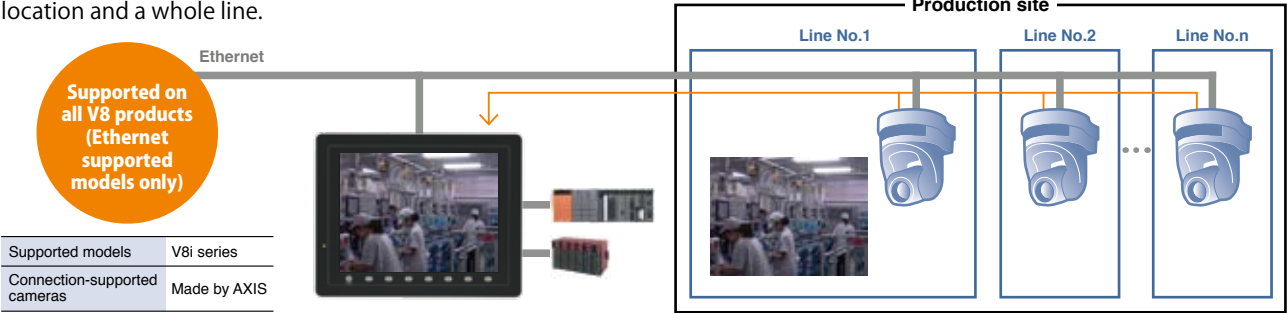
Ethernet expansion

Advanced feature based on Ethernet

Efficient line monitoring by network cameras

Network camera

Displays images from cameras connected to Ethernet on a V8 screen. You can efficiently achieve monitoring of a remote location and a whole line.



Cameras that support spinning and zooming functions can receive a command from MONITOUCH.

[1] Spinning of a camera (supported cameras only)

You can change the direction of a network camera from a remote location.



[2] Zooming of a camera (supported cameras only)

You can zoom in and out an image from a remote location.



Application software that connects your office with your production site at low cost. **TELLUS and V-Server**

"Ability of Factory" is enhanced by the remote function and the data collection function.

In the environment with a V-Server installed PC, you can monitor and control your production site from a remote location, even if you are in a foreign country.

[TELLUS and V-Server]

Features such as data collection and data management functions are available for collecting information on the production site in real time to manage it with Excel/CSV files. Additionally, you can monitor and control TELLUS-HMI and MONITOUCH from a remote location.



(Example)Industrial PC

Expanded possibilities by working together with Windows applications.

1 Working with VB programs

By creating VB programs using TELLUS access function, you can access TELLUS. Complicated arithmetic processing are done by VB programs and the result is displayed on TELLUS.

2 Working with optional units

It can be smoothly connected to a Windows printer. You can easily print out daily reports, monthly reports, information on lines and machines operation. Additionally, you can use high-capacity storage and memory.

3 Working with database

By using TELLUS and V-Server, you can work together with database such as SQL Sever. Tabulation of production achievement and storing of data on the number of defected products and causes of failure can easily be done.

4 Working with MONITOUCH

You can monitor multiple MONITOUCH installed on the machines from a remote location. And you can also collect production data and change machine settings by the recipe function.

## Ethernet expansion

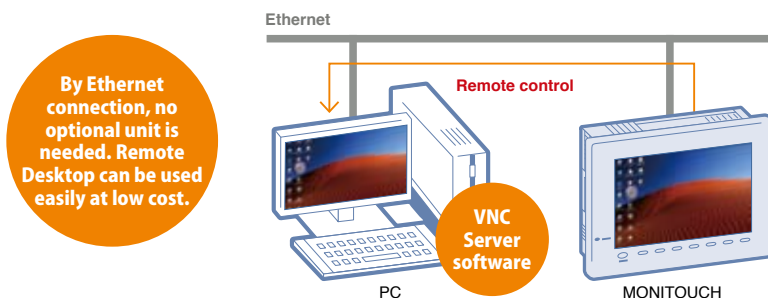
## Use Remote Desktop to make use of Windows applications

### Enhanced maintenance capacity led by Windows applications

#### Remote Desktop

By connecting to Ethernet, the server PC's screen is displayed on the V8 screen. At a production site where no PC can be set, you can operate the functions of PC from V8.

Supported models V815iX, V812iS, V810iS, V810iT, V808iS, V810iC, V808iC, V808iCH, V806iT, V806iC

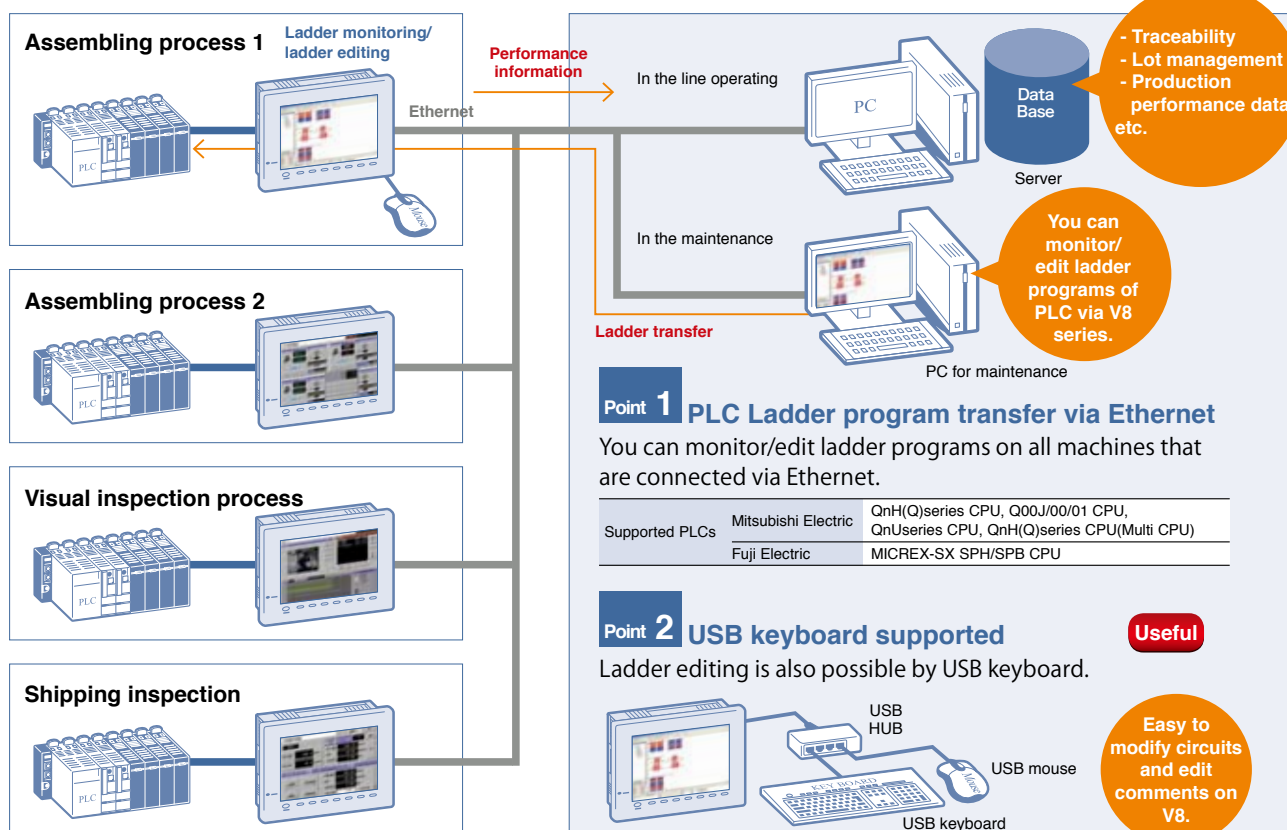
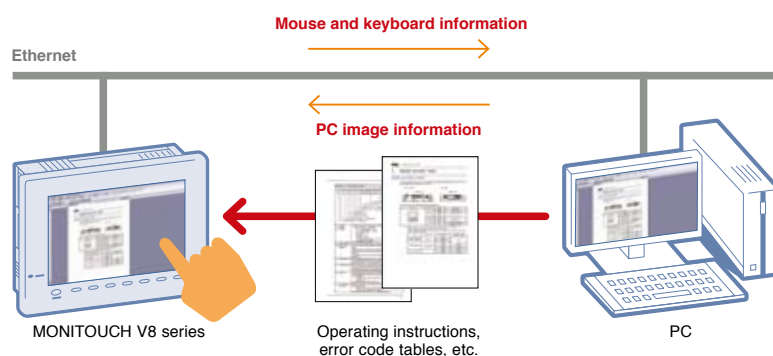


#### Application 1 Viewing operating instructions and manuals

By remote-controlling a PC connected via Ethernet from a V8 series, you can view operating instructions and manuals stored on the PC.

#### Application 2 Ladder monitoring/ladder editing

By starting a ladder software installed in the PC that is connected via Ethernet and activating the ladder transfer function, you can monitor/edit the ladder program of the connected PLC on V8.



|                                 |
|---------------------------------|
| Products                        |
| Display/Operation Features      |
| Communication Features          |
| Expandability                   |
| Usability                       |
| Configuration Software (V-SFT)  |
| Component Parts                 |
| Expandability with MES/Ethernet |
| Specifications                  |
| Dimensions and Part Names       |
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| Option                          |
| Option List                     |
| Customer Service                |
| Product Warranty                |

MES\*

Supporting the construction of advanced MES

V8 networking promotes the integration of sales, production management and manufacturing at low cost.

Reinforcing your production management through connection to the database

MES\* interface function

Data for production records, defect quantity, error causes and various kinds of information can be sent to the MES database server via V-Server in SQL. Communication with the database is possible without a gateway PC or complicated programming.

No Programming Required

Data can be saved in the database server by simple setting on V-SFT — no programming is required.

Preventing data loss

All data transferred to the database is saved with the error log so that it is completely secure.

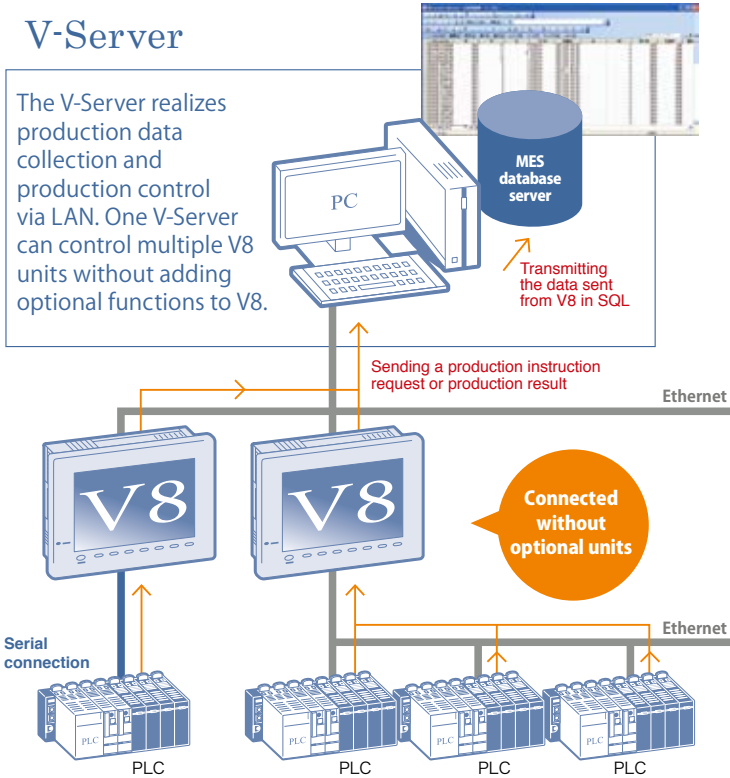
Decreasing system load

Data can be transferred to the database server when conditions are fulfilled. The server does not need to keep monitoring production, so the load on the system can be decreased.

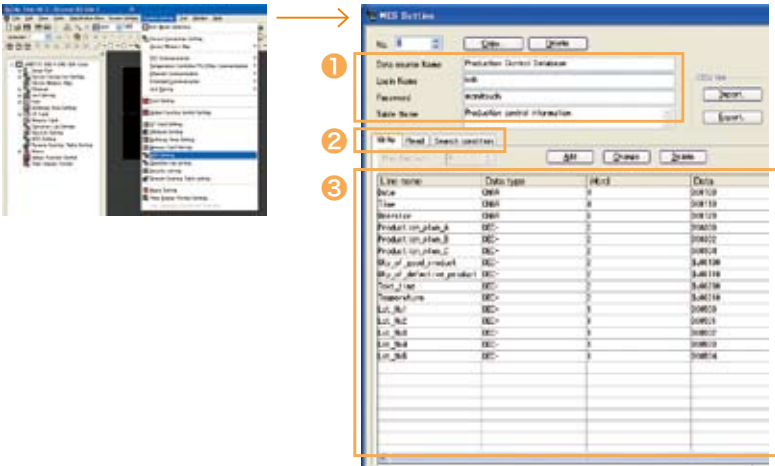
\* [MES]: The “Manufacturing Execution System” is for optimizing product quality, product quantity, delivery date, cost, etc. in the management/control of production sites.

V-Server

The V-Server realizes production data collection and production control via LAN. One V-Server can control multiple V8 units without adding optional functions to V8.



Easy MES setting!



You can set PLC register or MONITOUCH internal memory as a data to write to or to load from as well.

[ODBC] Open DataBase Connectivity  
Standard specifications of software to access database, which is being advocated by Microsoft.

Setting to access ODBC(①)

- Set a data source name, login name and password of the database.

Setting of operation to access the database(②)

- Three types (Writing, Loading, and Loading with search criteria) are supported:  
[Writing]  
Set contents to write to the database.  
[Loading]  
Set contents to load from the database.  
[Loading with search criteria]  
Set this when loading from the database with search criteria.

Setting of items to access ODBC (③)

- Set column names and data format to access the database.



# Specifications

High-end specifications open up new possibilities.

## General Specifications

| ItemModel                         |                                     | V815                                                                                                                                                                              |                                                      | V812                                              |                       |
|-----------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------|-----------------------|
|                                   |                                     | V815iX                                                                                                                                                                            | V815iXD                                              | V812xS                                            | V812xSD               |
| Power supply                      | Rated voltage                       | AC100 ~ 240V                                                                                                                                                                      | DC24V                                                | AC100 ~ 240V                                      | DC24V                 |
|                                   | Permissible range of voltage        | AC100 ~ 240V±10%                                                                                                                                                                  | DC24V±10%                                            | AC100 ~ 240V±10%                                  | DC24V±10%             |
|                                   | Permissible momentary power failure | Within 20ms                                                                                                                                                                       | Within 1ms                                           | Within 20ms                                       | Within 1ms            |
|                                   | Demand (maximum rating)             | 90VA or less                                                                                                                                                                      | 40W or less                                          | 70VA or less                                      | 30W or less           |
|                                   | Inrush current                      | 20A,10ms(AC100V) / 40A,10ms(AC200V)                                                                                                                                               | 30A,1ms(DC24V)                                       | 20A,10ms(AC100V) / 40A,10ms(AC200V)               | 30A,1ms <sup>∗3</sup> |
| Insulation resistance             |                                     | DC500V 10MΩ or more                                                                                                                                                               |                                                      |                                                   |                       |
| Physical environment              | Ambient temperature                 | 0℃ ~ +40℃ <sup>∗1</sup>                                                                                                                                                           |                                                      | 0℃ ~ +50℃ <sup>∗1</sup>                           |                       |
|                                   | Storage temperature                 | -10℃ ~ +50℃ <sup>∗1</sup>                                                                                                                                                         |                                                      | -10℃ ~ +60℃ <sup>∗1</sup>                         |                       |
|                                   | Ambient humidity                    | 85%RH or less(without dew condensation, Max. wet bulb temperature: 39℃ or lower) <sup>∗1</sup>                                                                                    |                                                      |                                                   |                       |
|                                   | Resistance to solvent               | No attachment of cutting oil or organic solvent                                                                                                                                   |                                                      |                                                   |                       |
|                                   | Atmosphere                          | Not exposed to corrosive gas or conductive dust                                                                                                                                   |                                                      |                                                   |                       |
|                                   | Operation altitude                  | 2,000 meter or lower                                                                                                                                                              |                                                      |                                                   |                       |
| Contamination level <sup>∗2</sup> |                                     | Level 2                                                                                                                                                                           |                                                      |                                                   |                       |
| Mechanical operating conditions   | Resistance to oscillation           | Vibration frequency: 10~150Hz, acceleration: 9.8m/s <sup>2</sup> (1.0G) pulsating width: 0.075mm, X,Y,Z: 3 directions 1 hour each way                                             |                                                      |                                                   |                       |
|                                   | Resistance to shock                 | Pulse shape: half-sine, peak acceleration: 147m/s <sup>2</sup> (15G), X,Y,Z: 3 directions, six times each way                                                                     |                                                      |                                                   |                       |
| Electric operating conditions     | Noise proof                         | 1500Vp-p<br>(pulse width 1μs, pulse rise time : 1ns)                                                                                                                              | 1000Vp-p<br>(pulse width 1μs, pulse rise time : 1ns) | 1500Vp-p (pulse width 1μs, pulse rise time : 1ns) |                       |
|                                   | Static discharge                    | Complies with IEC61000-4-2, contact: 6kV, air: 8kV                                                                                                                                |                                                      |                                                   |                       |
| Installation conditions           | Grounding                           | Grounding resistance : Less than 100Ω , FG/SG separation                                                                                                                          |                                                      |                                                   |                       |
|                                   | Structure                           | Protect structure: Front panel: Compatible with IP65 (when water-proof gasket is used.)<br>Rear cover: Compatible with IP20 Form: Single unit Installation method: Panel mounting |                                                      |                                                   |                       |
|                                   | Cooling system                      | Natural air cooling                                                                                                                                                               |                                                      |                                                   |                       |
|                                   | Weight                              | Approx.5.5kg                                                                                                                                                                      | Approx.5.3kg                                         | Approx.2.9kg                                      |                       |
|                                   | Dimensions WxHxD(mm)                | 382.8×312.8×81.1                                                                                                                                                                  |                                                      | 326.4×259.6×69.0                                  |                       |
|                                   | Panel cutout (mm)                   | 369.4×299.4(+0.5/-0)                                                                                                                                                              |                                                      | 313.0×246.2(+0.5/-0)                              |                       |
| Case color                        |                                     | —                                                                                                                                                                                 |                                                      | Gray                                              |                       |
| Material                          |                                     | Aluminium                                                                                                                                                                         |                                                      | PC/ABS                                            |                       |

<sup>\*1</sup> Keep wet bulb temperature under 39°C to avoid an accident.

<sup>\*2</sup> Contamination level is an index that shows the incidence rate of conductive substance. At Level 2, only nonconductive substance is produced, but a temporary conductive state may occur due to dew concentration.

<sup>\*3</sup> Hardware version: j or later

## Performance Specifications

| Item                      | Model                        | V815iX                                                                                                                                                                                               | V815iXD | V812iS                                | V812iSD               |
|---------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|-----------------------|
| Display specifications    | Screen memory                | 12.5MB                                                                                                                                                                                               |         |                                       |                       |
|                           | Display device               | TFT color LCD                                                                                                                                                                                        |         |                                       |                       |
|                           | Resolution W:H(dots)         | 1024×768                                                                                                                                                                                             |         | 800×600                               |                       |
|                           | Display size                 | 15 inches                                                                                                                                                                                            |         | 12.1 inches                           |                       |
|                           | Colors                       | 65,536 colors (without blinks) / 32,768 colors (with blinks)                                                                                                                                         |         |                                       |                       |
|                           | Backlight                    | CCFL                                                                                                                                                                                                 |         |                                       |                       |
|                           | Backlight life <sup>*5</sup> | About 60,000 hours                                                                                                                                                                                   |         | About 50,000 hours                    |                       |
|                           | Backlight Auto OFF           | Lit in normal (Set by the user)                                                                                                                                                                      |         |                                       |                       |
|                           | Power lamp                   | Lit in normal condition, blinks in alarm condition such as blowout of backlight bulbs                                                                                                                |         |                                       |                       |
|                           | Contrast adjustment          | Fixed                                                                                                                                                                                                |         |                                       |                       |
| Number of characters      | Brilliance control           | 3 levels (Adjusted into 128 grades by macro command)                                                                                                                                                 |         |                                       |                       |
|                           | 1/2-byte                     | 127 columns × 96 lines                                                                                                                                                                               |         | 100 columns × 75 lines                |                       |
| Enlargement of characters | 1-byte                       | 127 columns × 48 lines                                                                                                                                                                               |         | 100 columns × 37 lines                |                       |
|                           | 2-byte                       | 64 columns × 48 lines                                                                                                                                                                                |         | 50 columns × 37 lines                 |                       |
| Touch switch              |                              | X: 1 ~ 8 times Y: 1 ~ 8 times                                                                                                                                                                        |         |                                       |                       |
|                           | Switch resolution            | Analogue: 1,024×1,024                                                                                                                                                                                |         | Analogue: 1,024×1,024 / Matrix: 50×30 | Analogue: 1,024×1,024 |
| Function switch           | Mechanical life              | 1 million times or more                                                                                                                                                                              |         |                                       |                       |
|                           | Surface treatment            | Hard coating, Non glare finish 5%                                                                                                                                                                    |         |                                       |                       |
| External interface        | Number of function switches  | 8 switches                                                                                                                                                                                           |         |                                       |                       |
|                           | D-Sub 9-pin (CN1)            | RS-232C, RS-422/485, Asynchronous type, Data length : 7.8 bits, Parity : even, odd, none, Stop bit : 1, 2 bits, Baud rate : 4800, 9600, 19200, 38400, 57600, 76800, 115200, 187500 <sup>*6</sup> bps |         |                                       |                       |
|                           | Modular 8-pin (MJ1/ MJ2)     | RS-232C, RS-422/485 (two-wire system), Asynchronous type, Data length : 7.8 bits, Parity : even, odd, none, Stop bit : 1, 2 bits, Baud rate : 4800, 9600, 19200, 38400, 57600, 76800, 115200 bps     |         |                                       |                       |
|                           | CF card interface            | Compatible with CompactFlash™                                                                                                                                                                        |         |                                       |                       |
|                           | Ethernet <sup>*4</sup>       | Complies with IEEE802.3, Baud rate: 100Mbps, 10Mbps Cable: 100Ω Unshielded twist pair, Category 5, Max length: 100m                                                                                  |         |                                       |                       |
|                           | USB                          | Type A, Type B (Ver1.1)                                                                                                                                                                              |         |                                       |                       |
| Clock & Back up memory    | Battery                      | Coin-type lithium primary battery                                                                                                                                                                    |         |                                       |                       |
|                           | Back up memory (SRAM)        | 512KB                                                                                                                                                                                                |         |                                       |                       |
|                           | Back up period               | 5 years (Ambient temperature 25°C)                                                                                                                                                                   |         |                                       |                       |
|                           | Calendar accuracy            | Gap±90 sec. per month (Ambient temperature 25°C)                                                                                                                                                     |         |                                       |                       |

<sup>\*4</sup> Standard equipment only for V8i series

<sup>\*5</sup> When the panel surface luminance drops to 50% of the initial value at normal temperature (25°C)

<sup>\*6</sup> Available only when connected with SIEMENS MPI.



Specifications

General Specifications

| Item                            |                                     | Model                                                                                                                                                                                   | V810                               |                       |                    |                      | V808           |         |
|---------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------|--------------------|----------------------|----------------|---------|
|                                 |                                     |                                                                                                                                                                                         | V810xS / V810xT                    | V810xC                | V810xSD / V810xD   | V810xCD              | V808xSD        | V808xCD |
| Power supply                    | Rated voltage                       | AC100 ~ 240V                                                                                                                                                                            |                                    | DC24V                 |                    | DC24V                |                |         |
|                                 | Permissible range of voltage        | AC100 ~ 240V±10%                                                                                                                                                                        |                                    | DC24V±10%             |                    | DC24V±10%            |                |         |
|                                 | Permissible momentary power failure | Within 20ms                                                                                                                                                                             |                                    | Within 1ms            |                    | Within 1ms           |                |         |
|                                 | Demand (maximum rating)             | 70VA or less                                                                                                                                                                            | 60VA or less                       | 25W or less           | 20W or less        | 23W or less          | 20W or less    |         |
|                                 | Inrush current                      | 20A,10ms(AC100V)<br>40A,10ms(AC200V)                                                                                                                                                    | 16A,6ms(AC100V)<br>32A,7ms(AC200V) | 30A,1ms<br>(DC24V) *3 | 20A,1ms<br>(DC24V) | 30A,1ms(DC24V) *3    | 20A,1ms(DC24V) |         |
| Insulation resistance           |                                     | DC500V 10MΩ or more                                                                                                                                                                     |                                    |                       |                    |                      |                |         |
| Physical environment            | Ambient temperature                 | 0℃ ~ +50℃ *1                                                                                                                                                                            |                                    |                       |                    |                      |                |         |
|                                 | Storage temperature                 | -10℃ ~ +60℃                                                                                                                                                                             |                                    |                       |                    |                      |                |         |
|                                 | Ambient humidity                    | 85%RH or less(without dew condensation, Max. wet bulb temperature: 39□ or lower) *1                                                                                                     |                                    |                       |                    |                      |                |         |
|                                 | Resistance to solvent               | No attachment of cutting oil or organic solvent                                                                                                                                         |                                    |                       |                    |                      |                |         |
|                                 | Atmosphere                          | Not exposed to corrosive gas or conductive dust                                                                                                                                         |                                    |                       |                    |                      |                |         |
|                                 | Operation altitude                  | 2,000 meter or lower                                                                                                                                                                    |                                    |                       |                    |                      |                |         |
| Contamination level *2          |                                     | Level 2                                                                                                                                                                                 |                                    |                       |                    |                      |                |         |
| Mechanical operating conditions | Resistance to oscillation           | Vibration frequency: 10~150Hz, acceleration: 9.8m/s <sup>2</sup> (1.0G) pulsating width: 0.075mm, X,Y,Z: 3 directions 1 hour each way                                                   |                                    |                       |                    |                      |                |         |
|                                 | Resistance to shock                 | Pulse shape: half-sine, peak acceleration: 147m/s <sup>2</sup> (15G), X,Y,Z: 3 directions, six times each way                                                                           |                                    |                       |                    |                      |                |         |
| Electric operating conditions   | Noise proof                         | 1500Vp-p (pulse width 1μs, pulse rise time : 1ns)                                                                                                                                       |                                    |                       |                    |                      |                |         |
|                                 | Static discharge                    | Complies with IEC61000-4-2, contact: 6kV, air: 8kV                                                                                                                                      |                                    |                       |                    |                      |                |         |
| Installation conditions         | Grounding                           | Grounding resistance : Less than 100Ω , FG/SG separation                                                                                                                                |                                    |                       |                    |                      |                |         |
|                                 | Structure                           | Protect structure: Front panel: Compatible with IP65 (when water-proof gasket is used.)<br>Rear cover: Compatible with IP20    Form: Single unit    Installation method: Panel mounting |                                    |                       |                    |                      |                |         |
|                                 | Cooling system                      | Natural air cooling                                                                                                                                                                     |                                    |                       |                    |                      |                |         |
|                                 | Weight                              | Approx.2.5kg                                                                                                                                                                            |                                    |                       |                    | Approx.1.5kg         |                |         |
|                                 | Dimensions WxHxD(mm)                | 303.8×231.0×69.0                                                                                                                                                                        |                                    |                       |                    | 233.0×178.0×65.8     |                |         |
|                                 | Panel cutout (mm)                   | 289.0×216.2(+0.5/-0)                                                                                                                                                                    |                                    |                       |                    | 220.5×165.5(+0.5/-0) |                |         |
| Case color                      | Gray                                |                                                                                                                                                                                         |                                    |                       |                    |                      |                |         |
| Material                        | PC/ABS                              |                                                                                                                                                                                         |                                    |                       |                    |                      |                |         |

\*1 Keep wet bulb temperature under 39℃ to avoid an accident.  
\*2 Contamination level is an index that shows the incidence rate of conductive substance. At Level 2, only nonconductive substance is produced, but a temporary conductive state may occur due to dew concentration.  
\*3 Hardware version: j or later.

Performance Specifications

| Model                     |                                                      | V810iS                                                                                                                                                                                            | V810S | V810iT                              | V810T | V810iC | V810C | V808iS                 | V808S  | V808iC                | V808C |
|---------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------------------|-------|--------|-------|------------------------|--------|-----------------------|-------|
| Display specifications    | Screen memory                                        | 12.5MB                                                                                                                                                                                            |       |                                     |       |        |       | 4.5MB                  | 12.5MB |                       | 4.5MB |
|                           | Display device                                       | TFT color LCD                                                                                                                                                                                     |       |                                     |       |        |       |                        |        |                       |       |
|                           | Resolution W:H(dots)                                 | 800×600                                                                                                                                                                                           |       | 640×480                             |       |        |       | 800×600                |        | 640×480               |       |
|                           | Display size                                         | 10.4 inches                                                                                                                                                                                       |       |                                     |       |        |       | 8.4 inches             |        |                       |       |
|                           | Colors                                               | 65,536 colors (without blinks) / 32,768 colors (with blinks)                                                                                                                                      |       |                                     |       |        |       |                        |        |                       |       |
|                           | Backlight                                            | CCFL                                                                                                                                                                                              |       |                                     |       |        |       |                        |        |                       |       |
|                           | Backlight life *5                                    | About 50,000 hours                                                                                                                                                                                |       |                                     |       |        |       |                        |        |                       |       |
|                           | Backlight Auto OFF                                   | Lit in normal (Set by the user)                                                                                                                                                                   |       |                                     |       |        |       |                        |        |                       |       |
|                           | Power lamp                                           | Lit in normal condition, blinks in alarm condition such as blowout of backlight bulbs                                                                                                             |       |                                     |       |        |       |                        |        |                       |       |
|                           | Contrast adjustment                                  | Fixed                                                                                                                                                                                             |       |                                     |       |        |       |                        |        |                       |       |
| Brilliance control        | 3 levels (Adjusted into 128 grades by macro command) |                                                                                                                                                                                                   |       |                                     |       |        |       |                        |        |                       |       |
| Number of characters      | 1/2-byte                                             | 100 columns × 75 lines                                                                                                                                                                            |       | 80 columns × 60 lines               |       |        |       | 100 columns × 75 lines |        | 80 columns × 60 lines |       |
|                           | 1-byte                                               | 100 columns × 37 lines                                                                                                                                                                            |       | 80 columns × 30 lines               |       |        |       | 100 columns × 37 lines |        | 80 columns × 30 lines |       |
|                           | 2-byte                                               | 50 columns × 37 lines                                                                                                                                                                             |       | 40 columns × 30 lines               |       |        |       | 50 columns × 37 lines  |        | 40 columns × 30 lines |       |
| Enlargement of characters |                                                      | X: 1 ~ 8 times   Y: 1 ~ 8 times                                                                                                                                                                   |       |                                     |       |        |       |                        |        |                       |       |
| Touch switch              | Switch resolution                                    | Analog: 1,024×1,024                                                                                                                                                                               |       | Analog: 1,024×1,024 / Matrix: 40×24 |       |        |       | Analog: 1,024×1,024    |        |                       |       |
|                           | Mechanical life                                      | 1 million times or more                                                                                                                                                                           |       |                                     |       |        |       |                        |        |                       |       |
|                           | Surface treatment                                    | Hard coating, Non glare finish 5%                                                                                                                                                                 |       |                                     |       |        |       |                        |        |                       |       |
| Function switch           | Number of function switches                          | 8 switches                                                                                                                                                                                        |       |                                     |       |        |       |                        |        |                       |       |
| External interface        | D-Sub 9-pin (CN1) *6                                 | RS-232C, RS-422/485, Asynchronous type, Data length : 7.8 bits, Parity : even, odd, none, Stop bit : 1.2 bits, Baud rate : 4800, 9600, 19200, 38400, 57600, 76800, 115200,187500 <sup>8</sup> bps |       |                                     |       |        |       |                        |        |                       |       |
|                           | Modular 8-pin (MJ1/ MJ2)                             | RS-232C, RS-422/485 (two-wire system), Asynchronous type, Data length : 7.8 bits, Parity : even, odd, none, Stop bit : 1.2 bits, Baud rate : 4800, 9600, 19200, 38400, 57600, 76800, 115200 bps   |       |                                     |       |        |       |                        |        |                       |       |
|                           | CF card interface                                    | Compatible with CompactFlash™                                                                                                                                                                     |       |                                     |       |        |       |                        |        |                       |       |
|                           | Ethernet *4                                          | Complies with IEEE802.3   Baud rate: 100Mbps, 10Mbps, Cable: 100Ω Unsealed twist pair, Category 5, Max length: 100m                                                                               |       |                                     |       |        |       |                        |        |                       |       |
|                           | USB                                                  | Type A, Type B (Ver1.1)                                                                                                                                                                           |       |                                     |       |        |       |                        |        |                       |       |
| Clock & Back up memory    | Battery                                              | Coin-type lithium primary battery                                                                                                                                                                 |       |                                     |       |        |       |                        |        |                       |       |
|                           | Back up memory (SRAM)                                | 512KB                                                                                                                                                                                             |       |                                     |       | 128KB  |       | 512KB                  |        | 128KB                 |       |
|                           | Back up period                                       | 5 years (Ambient temperature 25℃)                                                                                                                                                                 |       |                                     |       |        |       |                        |        |                       |       |
|                           | Calendar accuracy                                    | Gap±90 sec. per month (Ambient temperature 25℃)                                                                                                                                                   |       |                                     |       |        |       |                        |        |                       |       |

\*4 Standard equipment only for V8i series  
\*5 When the panel surface luminance drops to 50% of the initial value at normal temperature (25℃)  
\*6 Available only when connected with SIEMENS MPI.



|                                        |
|----------------------------------------|
| Products                               |
| Display/<br>Operation<br>Features      |
| Communication<br>Features              |
| Expandability                          |
| Usability                              |
| Configuration<br>Software (V-SFT)      |
| Component<br>Parts                     |
| Expandability<br>with MES/<br>Ethernet |
| Specifications                         |
| Dimensions and<br>Part Names           |
| System<br>Configuration                |
| Option                                 |
| Option List                            |
| Customer Service                       |
| Product Warranty                       |

## General Specifications

| Item                            |                                     | Model | V806                                                                                                                                                                                    | V808CH                                                              |  |
|---------------------------------|-------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--|
| Power supply                    | Rated voltage                       |       | DC24V                                                                                                                                                                                   |                                                                     |  |
|                                 | Permissible range of voltage        |       | DC24V±10%                                                                                                                                                                               |                                                                     |  |
|                                 | Permissible momentary power failure |       | Within 1ms                                                                                                                                                                              |                                                                     |  |
|                                 | Demand (maximum rating)             |       | 15W or less                                                                                                                                                                             | 10W or less                                                         |  |
|                                 | Inrush current                      |       | 17A,2ms(DC24V)                                                                                                                                                                          | 15A,1.5ms(DC24V)                                                    |  |
| Insulation resistance           |                                     |       | DC500V 10MΩ or more                                                                                                                                                                     |                                                                     |  |
| Physical environment            | Ambient temperature                 |       | 0℃ ~ +50℃ *1                                                                                                                                                                            | 0℃ ~ +40℃ *1                                                        |  |
|                                 | Storage temperature                 |       | -10℃ ~ +60℃ *1                                                                                                                                                                          |                                                                     |  |
|                                 | Ambient humidity                    |       | 85%RH or less(without dew condensation, Max. wet bulb temperature: 39℃ or lower) *1                                                                                                     |                                                                     |  |
|                                 | Resistance to solvent               |       | No attachment of cutting oil or organic solvent                                                                                                                                         |                                                                     |  |
|                                 | Atmosphere                          |       | Not exposed to corrosive gas or conductive dust                                                                                                                                         |                                                                     |  |
|                                 | Operation altitude                  |       | 2,000 meter or lower                                                                                                                                                                    |                                                                     |  |
|                                 | Contamination level *2              |       | Level 2                                                                                                                                                                                 |                                                                     |  |
| Mechanical operating conditions | Resistance to oscillation           |       | Vibration frequency: 10~150Hz, acceleration: 9.8m/s <sup>2</sup> (1.0G) pulsating width: 0.075mm, X,Y,Z: 3 directions 1 hour each way                                                   |                                                                     |  |
|                                 | Resistance to shock                 |       | Pulse shape: half-sine, peak acceleration: 147m/s <sup>2</sup> (15G), X,Y,Z: 3 directions, six times each way                                                                           |                                                                     |  |
| Electric operating conditions   | Noise proof                         |       | 1500Vp-p (pulse width 1μs, pulse rise time : 1ns)                                                                                                                                       | 1000Vp-p (pulse width 1μs, pulse rise time : 1ns)                   |  |
|                                 | Static discharge                    |       | Complies with IEC61000-4-2, contact: 6kV, air: 8kV                                                                                                                                      |                                                                     |  |
| Installation conditions         | Grounding                           |       | Grounding resistance : Less than 100Ω , FG/SG separation                                                                                                                                |                                                                     |  |
|                                 | Structure                           |       | Protect structure: Front panel: Compatible with IP65 (when water-proof gasket is used.)<br>Rear cover: Compatible with IP20    Form: Single unit    Installation method: Panel mounting | IP65-compliant<br>(when I/F cover, CF cover and LAN cover are used) |  |
|                                 | Cooling system                      |       | Natural air cooling                                                                                                                                                                     |                                                                     |  |
|                                 | Weight                              |       | Approx.740g                                                                                                                                                                             | Approx.1.2kg                                                        |  |
|                                 | Dimensions W×H×D(mm)                |       | 182.5×138.8×50.8                                                                                                                                                                        | 259.0×232.0×55.0 (Excluding the emergency stop switch)              |  |
|                                 | Panel cutout (mm)                   |       | 174×131(+0.5/-0)                                                                                                                                                                        |                                                                     |  |
| Case color                      |                                     |       | Gray                                                                                                                                                                                    | Black                                                               |  |
| Material                        |                                     |       | PC/ABS                                                                                                                                                                                  |                                                                     |  |

\*1 Keep wet bulb temperature under 39°C to avoid an accident.

\*2 Contamination level is an index that shows the incidence rate of conductive substance. At Level 2, only nonconductive substance is produced, but a temporary conductive state may occur due to dew concentration.

## Performance Specifications

| Item                      | Model                                                    | V806iT                                                                                                                                                                                                  | V806T | V806iC                                       | V806C | V806iM                     | V806M | V808iCHx                                                                                                                                                                                       | V808CHx       |
|---------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------------------------------|-------|----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Display specifications    | Screen memory                                            | 4.5MB                                                                                                                                                                                                   |       |                                              |       |                            |       | 12.5MB                                                                                                                                                                                         | 4.5MB         |
|                           | Display device                                           | TFT color LCD                                                                                                                                                                                           |       | STN color LCD                                |       | STN monochrome LCD         |       | TFT color LCD                                                                                                                                                                                  |               |
|                           | Resolution W:H(dots)                                     | 320×240                                                                                                                                                                                                 |       |                                              |       |                            |       | 640×480                                                                                                                                                                                        |               |
|                           | Display size                                             | 5.7 inches                                                                                                                                                                                              |       |                                              |       |                            |       | 7.5 inches                                                                                                                                                                                     |               |
|                           | Colors                                                   | 65,536 colors (without blinks) / 32,768 colors (with blinks)                                                                                                                                            |       |                                              |       | 16 grayscale (with blinks) |       | 65,536 colors (without blinks) / 32,768 colors (with blinks)                                                                                                                                   |               |
|                           | Backlight                                                | CCFL                                                                                                                                                                                                    |       |                                              |       |                            |       |                                                                                                                                                                                                |               |
|                           | Backlight life *4                                        | About 50,000 hours                                                                                                                                                                                      |       | About 75,000 hours                           |       | About 58,000 hours         |       | About 50,000 hours                                                                                                                                                                             |               |
|                           | Backlight Auto OFF                                       | Lit in normal (Set by the user)                                                                                                                                                                         |       |                                              |       |                            |       |                                                                                                                                                                                                |               |
|                           | Power lamp                                               | Lit in normal condition, blinks in alarm condition such as blowout of backlight bulbs                                                                                                                   |       |                                              |       |                            |       |                                                                                                                                                                                                |               |
|                           | Contrast adjustment                                      | Fixed                                                                                                                                                                                                   |       | Adjustable (Function switch or macro switch) |       |                            |       | Fixed                                                                                                                                                                                          |               |
| Brilliance control        | 3 levels (Adjusted into 128 grades by macro command)     |                                                                                                                                                                                                         | Fixed |                                              |       |                            |       |                                                                                                                                                                                                |               |
| Number of characters      | 1/2-byte                                                 | 40 columns × 30 lines                                                                                                                                                                                   |       |                                              |       |                            |       | 80 columns × 60 lines                                                                                                                                                                          |               |
|                           | 1-byte                                                   | 40 columns × 15 lines                                                                                                                                                                                   |       |                                              |       |                            |       | 80 columns × 30 lines                                                                                                                                                                          |               |
|                           | 2-byte                                                   | 20 columns × 15 lines                                                                                                                                                                                   |       |                                              |       |                            |       | 40 columns × 30 lines                                                                                                                                                                          |               |
| Enlargement of characters |                                                          | X: 1 ~ 8 times    Y: 1 ~ 8 times                                                                                                                                                                        |       |                                              |       |                            |       |                                                                                                                                                                                                |               |
| Touch switch              | Switch resolution                                        | Analog: 1,024×1,024                                                                                                                                                                                     |       |                                              |       |                            |       |                                                                                                                                                                                                |               |
|                           | Mechanical life                                          | 1 million times or more                                                                                                                                                                                 |       |                                              |       |                            |       |                                                                                                                                                                                                |               |
|                           | Surface treatment                                        | Hard coating, Non glare finish 5%                                                                                                                                                                       |       |                                              |       |                            |       |                                                                                                                                                                                                |               |
| Function switch           | Number of function switches                              | 6 switches                                                                                                                                                                                              |       |                                              |       |                            |       | 12 switches (4 switches: external output)                                                                                                                                                      |               |
| External interface        | D-Sub 9-pin (CN1) *6<br>TB3 for V808iCHx/<br>V808CHx     | RS-232C, RS-422/485 (two-wire system), Asynchronous type, Data length : 7.8 bits,<br>Parity : even, odd, none, Stop bit : 1.2 bits,<br>Baud rate : 4800, 9600, 19200, 38400, 57600, 76800, 115200 bps   |       |                                              |       |                            |       | RS-232C, Asynchronous type, Data length : 7.8 bits,<br>Parity : even, odd, none, Stop bit : 1.2 bits, Baud rate : 4800,<br>9600, 19200, 38400, 57600, 76800, 115200 bps                        |               |
|                           | Modular 8-pin (MJ1/ MJ2)<br>TB2 for V808iCHx/<br>V808CHx | RS-232C, RS-422/485, Asynchronous type, Data length : 7.8 bits,<br>Parity : even, odd, none, Stop bit : 1.2 bits,<br>Baud rate : 4800, 9600, 19200, 38400, 57600, 76800, 115200,187500 <sup>5</sup> bps |       |                                              |       |                            |       | RS-422/485, Asynchronous type, Data length : 7.8 bits,<br>Parity : even, odd, none, Stop bit : 1.2 bits, Baud rate : 4800,<br>9600, 19200, 38400, 57600, 76800, 115200,187500 <sup>5</sup> bps |               |
|                           | CF card interface                                        | Optional unit DU-10                                                                                                                                                                                     |       |                                              |       |                            |       | Compatible with CompactFlash™                                                                                                                                                                  |               |
|                           | Ethernet *3                                              | Complies with IEEE802.3    Baud rate: 100Mbps, 10Mbps<br>Cable: 100Ω Unsealed twist pair, Category 5, Max length: 100m                                                                                  |       |                                              |       |                            |       | Complies with IEEE802.3                                                                                                                                                                        | Not available |
|                           | USB                                                      | Type A, Type B (Ver1.1)                                                                                                                                                                                 |       |                                              |       |                            |       | Type B (Ver1.1)                                                                                                                                                                                |               |
| Clock & Back up memory    | Battery                                                  | Coin-type lithium primary battery                                                                                                                                                                       |       |                                              |       |                            |       |                                                                                                                                                                                                |               |
|                           | Back up memory (SRAM)                                    | 512KB                                                                                                                                                                                                   | 128KB | 512KB                                        | 128KB | 512KB                      | 128KB | 512KB                                                                                                                                                                                          | 128KB         |
|                           | Back up period                                           | 5 years (Ambient temperature 25℃)                                                                                                                                                                       |       |                                              |       |                            |       |                                                                                                                                                                                                |               |
|                           | Calendar accuracy                                        | Gap±90 sec. per month (Ambient temperature 25℃)                                                                                                                                                         |       |                                              |       |                            |       |                                                                                                                                                                                                |               |

\* 3 Standard equipment only for V8i series

\* 4 When the panel surface luminance drops to 50% of the initial value at normal temperature (25°C)

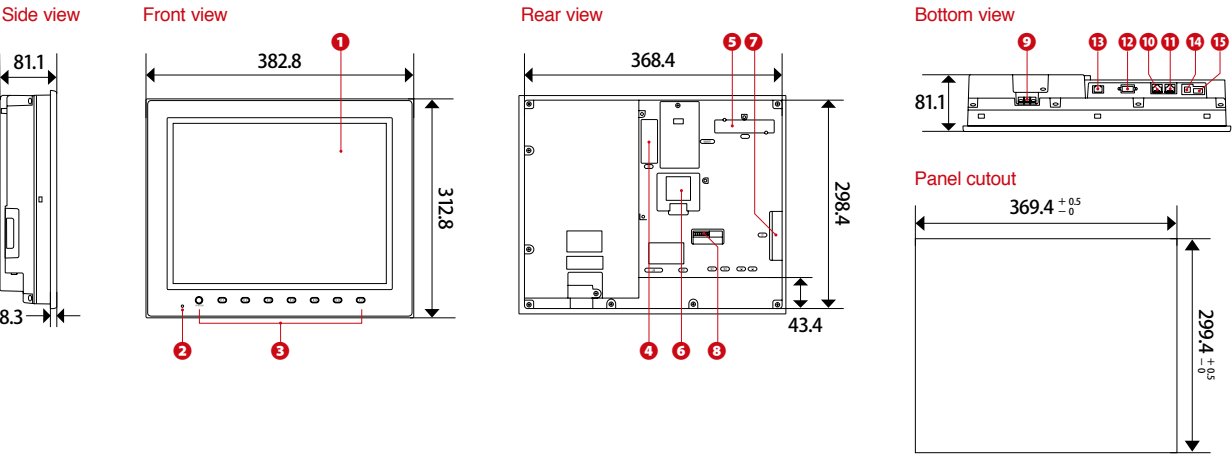
\* 5 Available only when connected with SIEMENS MPI.

\* 6 Available only when an option unit [DU-10] is used for V806

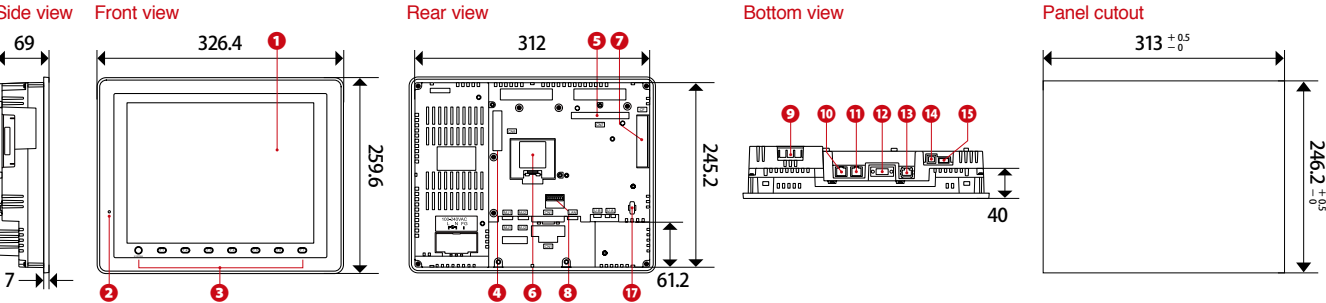
Dimensions and Part Names

Provided with plentiful kinds of interfaces

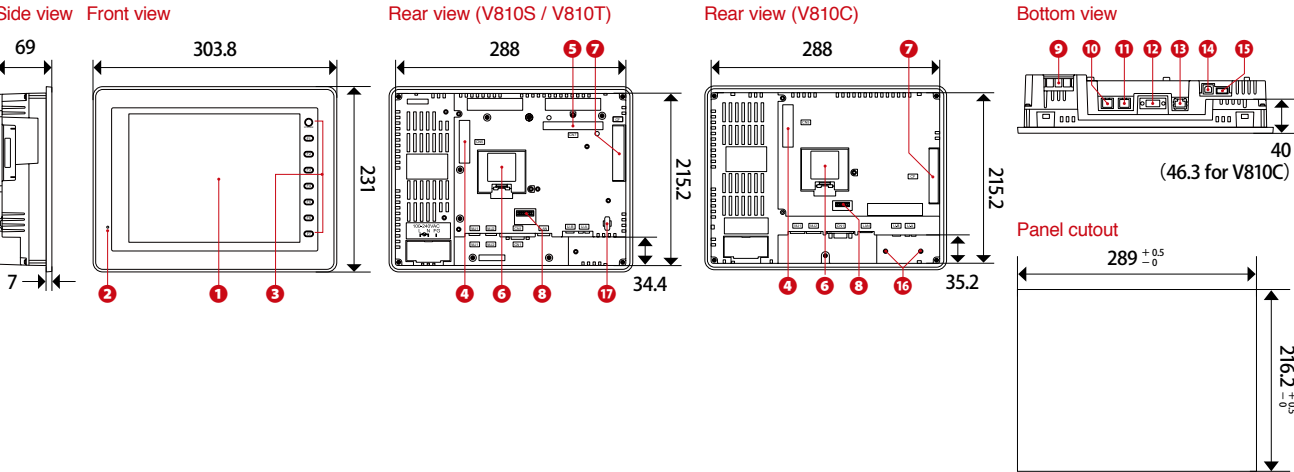
V815iX / V815iXD

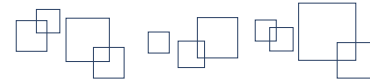


V812iS / V812S



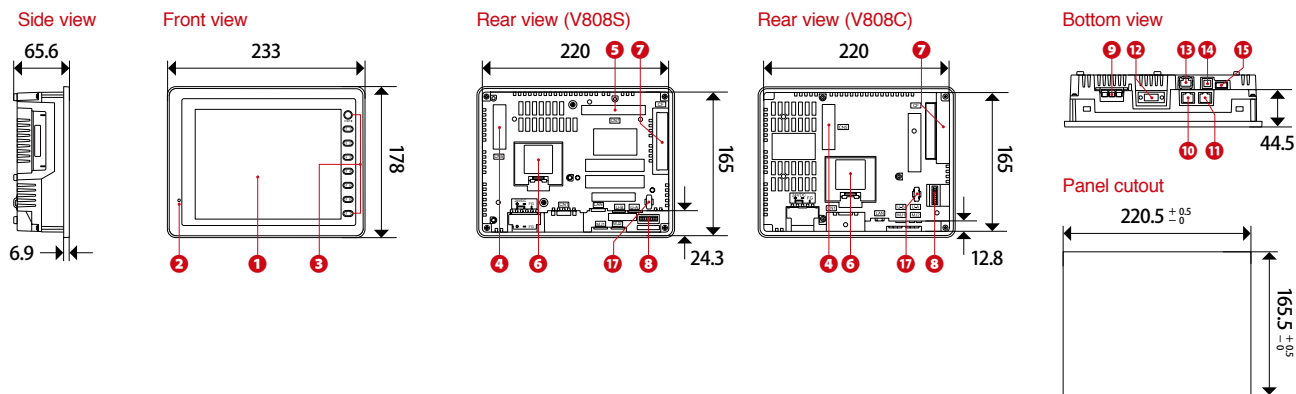
V810iS / V810S / V810iT / V810T / V810iC / V810C





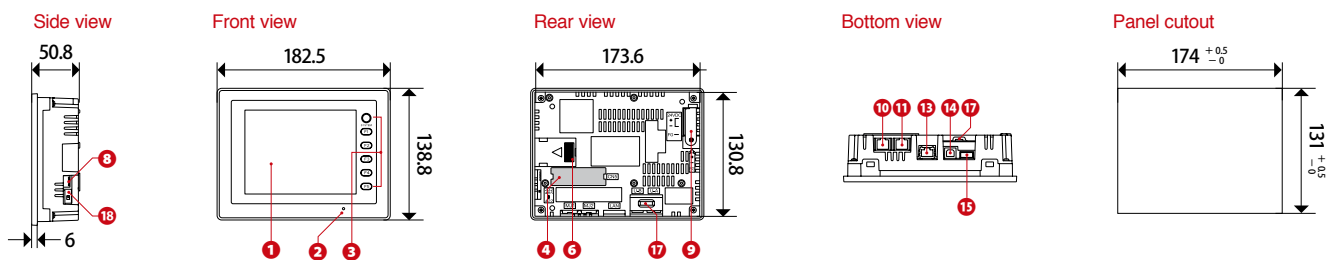
## V808iS / V808S / V808iC / V808C

(mm)



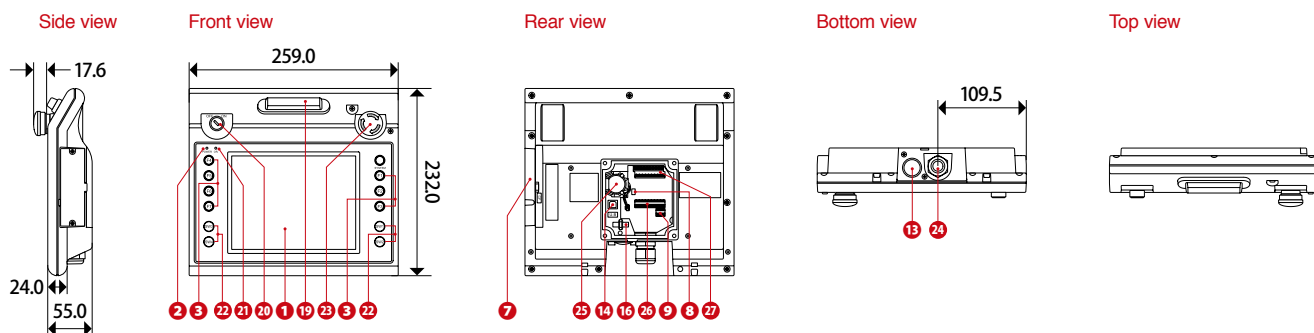
## V806iT / V806T / V806iC / V806C / V806iM / V806M

(mm)



## V808iCH / V808CH

(mm)



### Part Names

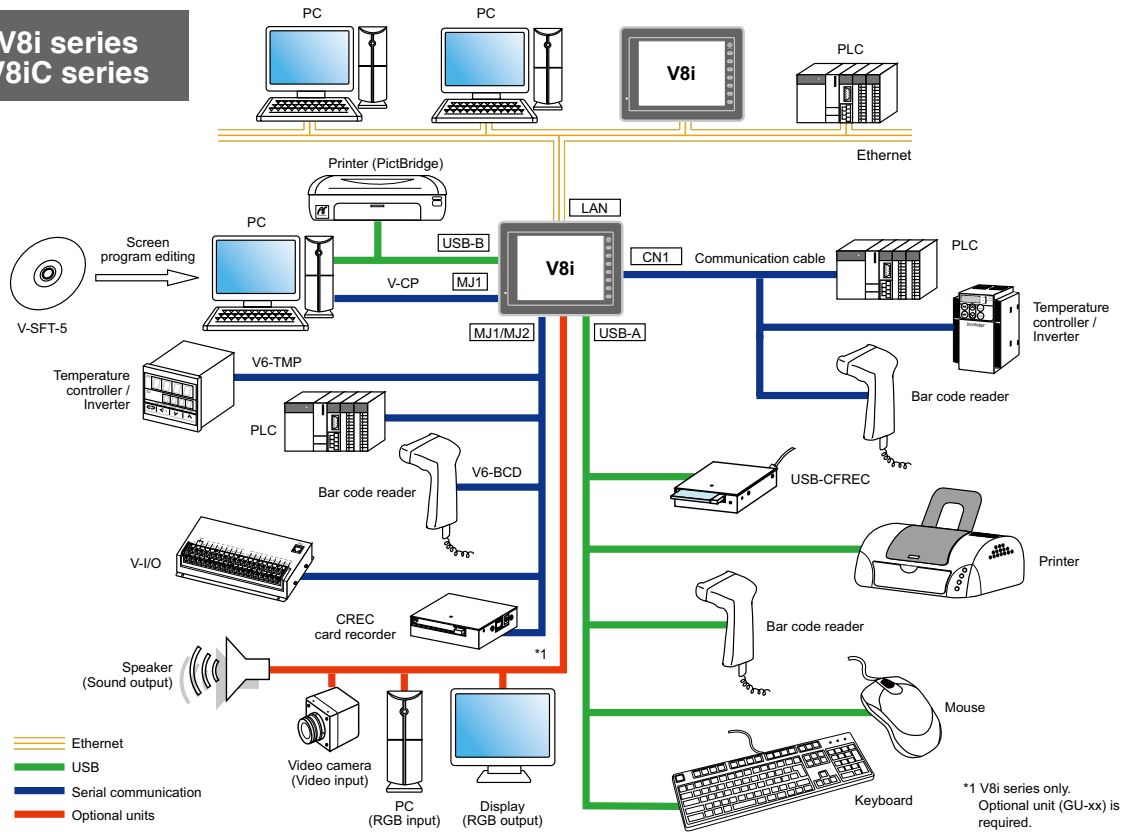
- |                                          |                                        |                                    |                           |
|------------------------------------------|----------------------------------------|------------------------------------|---------------------------|
| 1 Display                                | 8 DIP switch                           | 15 USB-A (master)                  | 21 OPERATION lamp         |
| 2 Power lamp                             | 9 Power supply(TB1)                    | 16 Screw hole                      | 22 External output switch |
| 3 Function switch                        | 10 Modular 8-pin for serial port (MJ1) | for fixing USB cable lock          | 23 Emergency stop switch  |
| 4 Connector for communication unit (CN5) | 11 Modular 8-pin for serial port (MJ2) | 17 Inlet port for fixing USB cable | 24 Cable insertion slot   |
| 5 Connector for optional unit (CN7)      | 12 D-Sub 9-pin for serial port (CN1)   | 18 Slide switch                    | 25 Battery                |
| 6 Battery holder                         | 13 100BASE-TX/10BASE-T port (LAN)      | 19 Deadman switch                  | 26 Terminal block (TB2)   |
| 7 CF card slot (CF)                      | 14 USB-B (slave)                       | 20 Key switch                      | 27 Terminal block (TB3)   |



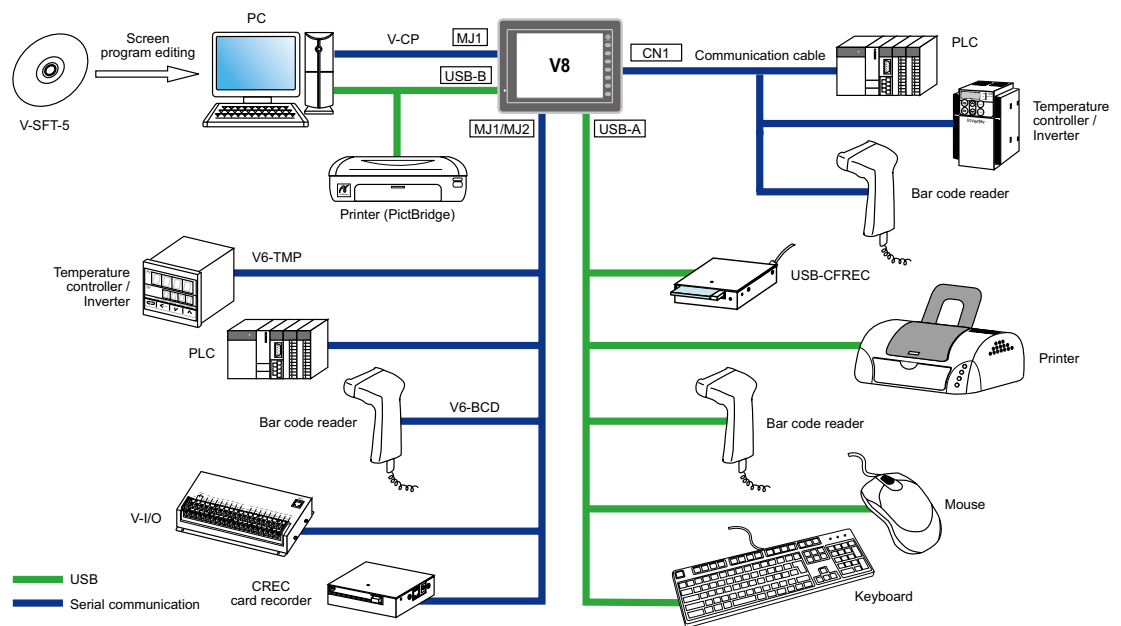
System Configuration

Flexible system configuration meets diversified requirements

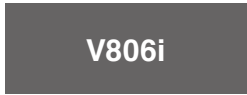
V8i series  
V8iC series



V8 series  
V8C series



**V806  
+ DU-10**



## Option Units

Optional units that expand V8's performance

### Various units for greater expandability and usability

#### Expansion/ Communication Units

##### ● Expansion units

###### GU-00(Video input + sound output unit)

Displays images from a video camera on V8 and outputs sound files through external speakers.

###### GU-01(RGB input + sound output unit)

Displays PC images on V8 and outputs sound files through external speakers.

###### GU-02(RGB output + sound output unit)

Displays images of V8 on PC display and outputs sound files through external speakers.

###### GU-03(Sound output unit)

Outputs sound files through external speakers.

###### GU-10(Video input(2ch) + RGB input)

Displays images from video cameras and PC images on V8 simultaneously.

###### GU-11(RGB input(2ch))

Displays RGB images such as PC images through two channels on V8 simultaneously.

###### DU-10(V806)

Compatible with a D-Sub9-pin/CF card.



##### ● Communication units



| XX   | Compatible network | XX | Compatible network      |
|------|--------------------|----|-------------------------|
| 00   | OPCN-1             | 04 | PROFIBUS-DP             |
| 01   | T-Link             | 06 | SX bus                  |
| 02   | CC-Link            | 07 | DeviceNet <sup>*1</sup> |
| 03-3 | Ethernet           | 08 | FL-net                  |

Connected to various networks. Multiple V8 panels can be connected to one PLC. Other devices can be linked to the network, improving system's cost-effectiveness.

<sup>\*1</sup> Under development

#### Optional units



###### USB-CFREC (USB ports for CF card recorder)

Used for recording or reading data onto or from a CF card. Fitted on the front of the panel.



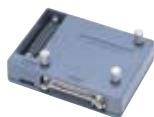
###### TC-D9 (Terminal converter)

Connects V8 with other units via RS-422/485 terminal.



###### CREC (Card recorder)

Used for recording data onto a card for back-up. Also used for recording data by memory manager or data logging functions.



###### V-MDD (ACPU/QnACPU/FXCPU dual port interface)

Used to double the port of the connector for programmer units. Useful when connecting to ACPU/QnACPU/FXCPU(MITSUBISHI) directly.

#### Application Software

##### ● Configuration software

###### V-SFT-5(Ver.5)

For Windows98/Me/NT Version4.0/2000/XP/XP 64 Edition/Vista 32bit



#### Cables

| Type   | Configuration                                          | Connected to                             |
|--------|--------------------------------------------------------|------------------------------------------|
| V-CP   | RS-232C<br>Modular 8-pin<br>D-Sub 9-pin<br>Length: 3 m | PC                                       |
| V6-BCD | RS-232C<br>Modular 8-pin<br>Length: 3 m                | Bar code reader                          |
| V6-MLT | RS-422<br>Modular 8-pin<br>Length: 3 m                 | MONITOUCH V8/V7/V6 series                |
| V6-TMP | RS-232C/485<br>Modular 8-pin<br>Length: 3, 5 or 10 m   | Temperature controller and inverter etc. |
| UA-FR  | Length: 1 m                                            | USB-CFREC Card reader/writer             |
| UB-FR  | Length: 1 m                                            | PC PictBridge Printer                    |



###### V7-BT (Battery)

Lithium battery for V8 series



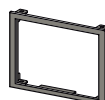
###### V8xx-GS/V8xx-GSN10

Protection sheet for panels: 5 sheets per set. N10 is a non-glare type sheet. See P37 for details.



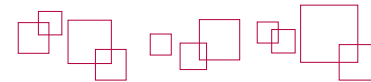
###### V8xxx-FL

Backlight for V8. See P37 for details.



###### Panel Adapter

Used when fitting V8 into V4/GD-80/GD-65/GD-64 panel cutout.



# Option List

## Optional units that expand V8's performance

| Model                        | Description                                                        | Model |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
|------------------------------|--------------------------------------------------------------------|-------|----|---|------|---|------|---|----|---|----|------|----|---|-----|----|----------------|----------------|----------------|----------------|----------------|----------------|
|                              |                                                                    | V815  |    |   | V812 |   | V810 |   |    |   |    | V808 |    |   |     |    | V806           |                |                |                |                |                |
|                              |                                                                    | iX    | iS | S | iS   | S | iT   | T | iC | C | iS | S    | iC | C | iCH | CH | iT             | T              | iC             | C              | iM             | M              |
| Configuration software       |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V-SFT-5                      | Configuration software for V series (CD+Japanese manual set) ver.5 | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   | ○  | ○              | ○              | ○              | ○              | ○              | ○              |
| V-SFT-5(CD)                  | Configuration software for V series (Installation CD) ver.5        | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   | ○  | ○              | ○              | ○              | ○              | ○              | ○              |
| Communication units          |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| CU-00                        | OPCN-1                                                             | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| CU-01                        | T-Link                                                             | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| CU-02                        | CC-Link                                                            | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| CU-03-3                      | Ethernet                                                           | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| CU-04                        | PROFIBUS-DP                                                        | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| CU-06                        | SX Bus                                                             | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| CU-08                        | FL-net Ver.2(OPCN-2)                                               | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| Optional units               |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| GU-00                        | VIDEO 4ch input, audio output                                      | ○     | ○  |   | ○    |   | ○    |   |    |   | ○  |      |    |   |     |    |                |                |                |                |                |                |
| GU-01                        | RGB 1ch input, audio output                                        | ○     | ○  |   | ○    |   | ○    |   |    |   | ○  |      |    |   |     |    |                |                |                |                |                |                |
| GU-02                        | RGB 1ch output, audio output                                       | ○     | ○  |   | ○    |   | ○    |   |    |   | ○  |      |    |   |     |    |                |                |                |                |                |                |
| GU-03                        | audio output                                                       | ○     | ○  |   | ○    |   | ○    |   |    |   | ○  |      |    |   |     |    |                |                |                |                |                |                |
| GU-10                        | VIDEO 2ch input, RGB 1ch input                                     | ○     | ○  |   | ○    |   | ○    |   |    |   | ○  |      |    |   |     |    |                |                |                |                |                |                |
| GU-11                        | RGB 2ch input                                                      | ○     | ○  |   | ○    |   | ○    |   |    |   | ○  |      |    |   |     |    |                |                |                |                |                |                |
| DU-10                        | Optional unit dedicated to V806 (Dsub9+CF card)                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    | ○              | ○              | ○              | ○              | ○              | ○              |
| Cable                        |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V-CP                         | Screen program transfer cable (3M)                                 | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| UA-FR                        | USB-A panel surface fixing cable (1M)                              | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| UB-FR                        | USB-B panel surface fixing cable (1M)                              | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   | ○  |                | ○              | ○              | ○              | ○              | ○              |
| V6-MLT                       | Multi-link 2 master cable (3M)                                     | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| V6-TMP                       | Temperature controller connecting cable (3M)                       | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| MJ-D25                       | MJ-Dsub25 conversion cable                                         | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| MJ2-PLC                      | MJ-Dsub25 conversion cable for V806 and V706                       | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| D9-MB-CPUQ                   | Mitsubishi Electric A series/QnA series CPU RS-422 (2,3,5,10,15M)  | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> |
| D9-QCPU2                     | Mitsubishi Electric Q series CPU RS-232C(2,3,5,10,15M)             | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> |
| D9-MI2-09                    | Mitsubishi Electric link unit RS-232C(2,3,5,10,15M)                | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> |
| D9-MI4-FX                    | Mitsubishi Electric FX series CPU RS-422(2,3,5,10,15M)             | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> |
| D9-FU-SPHCPU                 | Fuji Electric SPH CPU RS-485(4-wire) (2,3,5M)                      | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> |
| D9-FU-SPBCPU                 | Fuji Electric SPB CPU RS-485(4-wire) (2,3,5M)                      | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> |
| V706-ACPU                    | Mitsubishi Electric A series/QnA series CPU RS-422(2,3,5,10,15M)   |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    | ○ <sup>2</sup> | ○ <sup>2</sup> | ○ <sup>2</sup> | ○ <sup>2</sup> | ○ <sup>2</sup> | ○ <sup>2</sup> |
| MJ2-MI4FX                    | Mitsubishi Electric FX series CPU RS-422(2,3,5M)                   |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    | ○              | ○              | ○              | ○              | ○              | ○              |
| MJ2-FU-SPHCPU                | Fuji Electric SPH CPU RS-485(4-wire) (2,3,5M)                      |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    | ○              | ○              | ○              | ○              | ○              | ○              |
| MJ2-FU-SPBHCPU               | Fuji Electric SPB CPU RS-485(4-wire) (2,3,5M)                      |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    | ○              | ○              | ○              | ○              | ○              | ○              |
| V8H-C                        | External connection cable for V808CH (3,5,15,20M)                  |       |    |   |      |   |      |   |    |   |    |      |    |   |     | ○  | ○              |                |                |                |                |                |
| D9-D25                       | Dsub9-Dsub25 conversion cable (0.3M)                               | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> |
| Communication terminal block |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| TC-D9                        | Terminal converter for V8                                          | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> | ○ <sup>1</sup> |
| Card recorder                |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| USB-CFREC                    | USB CF card recorder                                               | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| Dual port interface          |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V-MDD                        | Mitsubishi ACPU/QnACPU/FXCPU port interface                        | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   | ○  | ○              | ○              | ○              | ○              | ○              | ○              |
| I/O unit                     |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V-I/O                        | Expanded serial I/O unit                                           | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   |    | ○              | ○              | ○              | ○              | ○              | ○              |
| Battery                      |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V7-BT                        | Battery for V8, V7 and V606e                                       | ○     | ○  | ○ | ○    | ○ | ○    | ○ | ○  | ○ | ○  | ○    | ○  | ○ | ○   | ○  | ○              | ○              | ○              | ○              | ○              | ○              |
| Switch guard cover           |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V8H-SWG                      | Switch guard                                                       |       |    |   |      |   |      |   |    |   |    |      |    |   |     | ○  | ○              |                |                |                |                |                |
| Wall-hanging clasp           |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V6H-WF                       | Wall-hanging clasp set (For V808CH/V608CH)                         |       |    |   |      |   |      |   |    |   |    |      |    |   |     | ○  | ○              |                |                |                |                |                |
| V6H-WF1                      | Wall-hanging bracket (wall side) (For V808CH/V608CH)               |       |    |   |      |   |      |   |    |   |    |      |    |   |     | ○  | ○              |                |                |                |                |                |
| V8H-WFV                      | Fitting for V808CH (VESA-compliant)                                |       |    |   |      |   |      |   |    |   |    |      |    |   |     | ○  | ○              |                |                |                |                |                |
| Protection sheet             |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V806-GS                      | Surface protection sheet for V806                                  |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    | ○              | ○              | ○              | ○              | ○              | ○              |
| V806-GSN10                   | Surface protection sheet for V806 (nonglare)                       |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    | ○              | ○              | ○              | ○              | ○              | ○              |
| V808-GS                      | Surface protection sheet for V808                                  |       |    |   |      |   |      |   |    |   |    | ○    | ○  | ○ | ○   |    |                |                |                |                |                |                |
| V808-GSN10                   | Surface protection sheet for V808 (nonglare)                       |       |    |   |      |   |      |   |    |   |    | ○    | ○  | ○ | ○   |    |                |                |                |                |                |                |
| V810-GS                      | Surface protection sheet for V810                                  |       |    |   | ○    | ○ | ○    | ○ | ○  | ○ | ○  |      |    |   |     |    |                |                |                |                |                |                |
| V810-GSN10                   | Surface protection sheet for V810 (nonglare)                       |       |    |   | ○    | ○ | ○    | ○ | ○  | ○ | ○  |      |    |   |     |    |                |                |                |                |                |                |
| V812-GS                      | Surface protection sheet for V812                                  |       | ○  | ○ |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V812-GSN10                   | Surface protection sheet for V812 (nonglare)                       |       | ○  | ○ |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V715-GS                      | Surface protection sheet for V815/V715                             | ○     |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V715-GSN10                   | Surface protection sheet for V815/V715 (nonglare)                  | ○     |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| Backlight                    |                                                                    |       |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V808C-FL                     | Backlight for V808C series                                         |       |    |   |      |   |      |   |    |   |    |      |    | ○ | ○   |    |                |                |                |                |                |                |
| V808S-FL                     | Backlight for V808S series                                         |       |    |   |      |   |      |   |    |   |    |      | ○  | ○ |     |    |                |                |                |                |                |                |
| V810-FL                      | Backlight for V810S/T series                                       |       |    |   | ○    | ○ | ○    | ○ | ○  | ○ | ○  |      |    |   |     |    |                |                |                |                |                |                |
| V812-FL                      | Backlight for V812S series                                         |       | ○  | ○ |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |
| V715-FL                      | Backlight for V815iX series                                        | ○     |    |   |      |   |      |   |    |   |    |      |    |   |     |    |                |                |                |                |                |                |

\*1 The optional unit: DU-10 is required.

\*2 Used both MJ1/MJ2 ports.

|                                        |
|----------------------------------------|
| Products                               |
| Display/<br>Operation<br>Features      |
| Communication<br>Features              |
| Expandability                          |
| Usability                              |
| Configuration<br>Software (V-SFT)      |
| Component<br>Parts                     |
| Expandability<br>with MES/<br>Ethernet |
| Specifications                         |
| Dimensions and<br>Part Names           |
| System<br>Configuration                |
| Option                                 |
| Option List                            |
| Customer Service                       |
| Product Warranty                       |

# Customer Service

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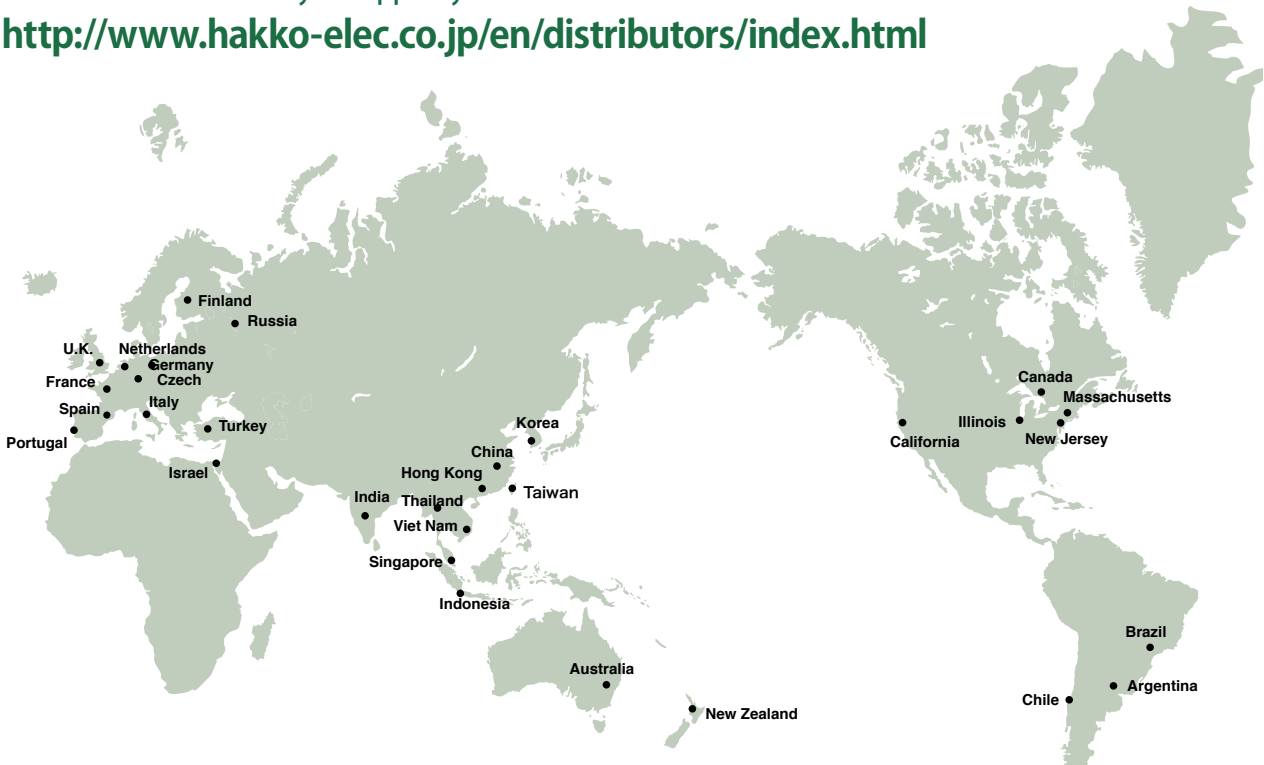
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# Product Warranty

## To the purchasers of Hakko Electronics products:

The warranty of this product is as follows, unless there are special instructions that state otherwise in the quote, contract, catalog, or specifications at the time of the quote or order.

The purpose or area of use may be limited, and a routine checkup may be required depending on the product. Please contact the distributor from which you purchased the product, or Hakko Electronics for further information.

Please conduct inspection of the product promptly upon purchase or delivery. Also, please give sufficient consideration to management and maintenance of the product prior to accepting it.

### 1. Period and Coverage of the Warranty

#### 1-1 Period

- (1) The period of the warranty is effective until twenty-four (24) months from the date of manufacture printed on the plate.
- (2) The above period may not be applicable if the particular environment, conditions or frequency of use affects the lifetime of the product.
- (3) The warranty for the parts repaired by Hakko Electronics' service department is effective for six (6) months from the date of repair.

#### 1-2 Coverage

- (1) If malfunction occurs during the period of warranty due to negligence on the part of Hakko Electronics, the malfunctioning parts are exchanged or repaired free of charge at the point of purchase or delivery. However, the warranty does not apply to the following cases:
  - 1) The malfunction occurs due to inappropriate conditions, environment, handling or usage that is not specified in the catalog, instruction book or users' manual.
  - 2) The malfunction is caused by factors that do not originate in the purchased or delivered product.
  - 3) The malfunction is caused by another device or software design that does not originate in a Hakko Electronics product.
  - 4) The malfunction occurs due to an alteration or repair that was not performed by Hakko Electronics.
  - 5) The malfunction occurs because the expendable parts listed in the instruction book or catalog were not maintained or replaced in an appropriate manner.
  - 6) The malfunction occurs due to factors that were not foreseeable by the practical application of science and technology at the time of purchase or delivery.
  - 7) The malfunction occurs because the product is used for a purpose other than that for which it is intended.
  - 8) The malfunction occurs due to a disaster or natural disaster that Hakko Electronics is not responsible for.
- (2) The warranty is only applicable to the single purchased and delivered product.
- (3) The warranty is only valid for the conditions stated in (1) above. Any damage induced by the malfunction of the purchased or delivered product, including damage or loss to a device or machine and passive damage, is not covered by the warranty.

#### 1-3 Malfunction Diagnosis

The initial diagnosis of malfunction is to be made by the purchaser. The diagnosis can be conducted by Hakko Electronics or its delegated service provider with due charge upon the request of the purchaser. The charge is to be paid by the purchaser at the rate stipulated in the rate schedule of Hakko Electronics.

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### 4. Delivery

Standard products that do not entail application setting or adjustment are regarded as received by the purchaser upon delivery. Hakko Electronics is not responsible for local adjustments and test runs.

### 5. Service

The price of the delivered or purchased products does not include the service fee for the technician. Please contact Hakko Electronics or its service providers for further information.

### 6. Scope of Application

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## Safety Considerations

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- Consult your distributor or us for further information about products in this catalog.

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