Fuji Electric

Innovating *Energy Technology*

Programmable Operator interface

MONITOUCH

V9 - completing your automation needs

Hakko Electronics Co., Ltd.

From April 2014, MONITOUCH V9 will bring you enhanced capacity and a more user-friendly interface

Compatible with mobile equipment, advanced use of information through networking, high-speed free-style drawing and improved operability thanks to new design architecture. We are confident that our new range will surpass your expectations.

V9 Advanced High resolution widescreen LCD with wireless LAN

V9071iWR
Widescreen
To be released in Fall 2014

Type:	TFT
Size:	7.0 inches
Resolution:	WVGA
Touch switch:	Capacitance type
Wireless LAN:	Provided
Wired LAN I/F:	1ch
Serial I/F:	2ch
AUDIO OUT I/F:	Not provided

V9101iWR
Widescreen
To be released in Fall 2014

Type:	TFT
Size:	10.1 inches
Resolution:	WSVGA
Touch switch:	Capacitance type
Wireless LAN:	Provided
Wired LAN I/F:	2ch
Serial I/F:	3ch
AUDIO OUT I/F:	Provided

V9 Standard High performance model

V9080iS
To be released in Spring 2014

Type:	TFT
Size:	8.4 inches
Resolution:	SVGA
Touch switch:	Analog resistive film
Wired LAN I/F:	1ch
Serial I/F:	3ch
AUDIO OUT I/F:	Provided

V9100iS
To be released in Spring 2014

Type:	TFT
Size:	10.4 inches
Resolution:	SVGA
Touch switch:	Analog resistive film
Wired LAN I/F:	1ch
Serial I/F:	3ch
AUDIO OUT I/F:	Provided

V9120iS
To be released in Fall 2014

Type:	TFT
Size:	12.1 inches
Resolution:	SVGA
Touch switch:	Analog resistive film
Wired LAN I/F:	1ch
Serial I/F:	3ch
AUDIO OUT I/F:	Provided

V9150iX
To be released in Fall 2014

Type:	TFT
Size:	15.0 inches
Resolution:	XGA
Touch switch:	Analog resistive film
Wired LAN I/F:	1ch
Serial I/F:	3ch
AUDIO OUT I/F:	Provided

V9 Lite Basic model

V9060iT
To be released in Fall 2014

Type:	TFT
Size:	5.7 inches
Resolution:	QVGA
Touch switch:	Analog resistive film
Wired LAN I/F:	1ch
Serial I/F:	2ch
AUDIO OUT I/F:	Not provided

V9080iC
To be released in Spring 2014

Type:	TFT
Size:	8.4 inches
Resolution:	VGA
Touch switch:	Analog resistive film
Wired LAN I/F:	1ch
Serial I/F:	3ch
AUDIO OUT I/F:	Not provided

V9100iC
To be released in Spring 2014

Type:	TFT
Size:	10.4 inches
Resolution:	VGA
Touch switch:	Analog resistive film
Wired LAN I/F:	1ch
Serial I/F:	3ch
AUDIO OUT I/F:	Not provided

User-friendly Operation

Capacitance Type Touch Panel
V9 Advanced type only

In addition to a pressure-sensitive touch panel, capacitance type touch panel is available. This enables easier and smoother operation.

Easy Networking

Wireless LAN **V9 Advanced type only**

Wireless LAN interface is incorporated in addition to wired LAN. Easily accessible to a device with a wireless LAN interface.
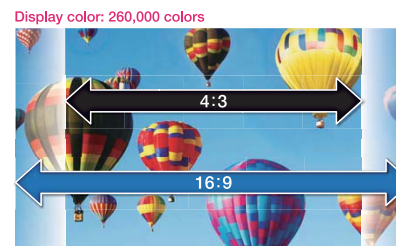
Two Channels for Wired LAN **V9 Advanced type only**

Two channels are provided for wired LAN in some models. V9 can be used as a gateway between networks.

Improved Expression

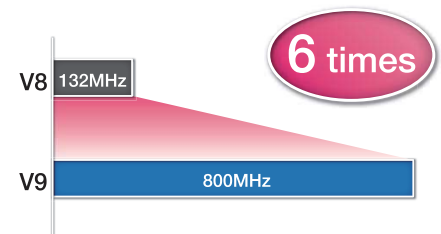### Widescreen LCD **V9 Advanced type only**

Equipped with high-resolution, widescreen LCD (16:9). Greater volume and variety of information can be displayed on the screen.

Display color: 260,000 colors

4:3

16:9

Exponentially Improved Performance

High Performance Processor

High-frequency CPU clock enables high-speed response and quick display.

6 times

V8 132MHz

V9 800MHz

MONITOUCH THE PREMIUM

Hello, V9

On its release in 1988 as the first ever programmable display, MONITOUCH augured in a new era of human-machine interface technology. It is now used as an information terminal for countless different purposes in production sites all over the world. The total number of shipments has reached approximately 1 million. In April 2014, Hakko Electronics Co., Ltd. will introduce its new range with an impressive array of exciting new cutting-edge features expressly designed to meet the needs of our clients. MONITOUCH THE PREMIUM Prepare for the next generation of programmable displays.
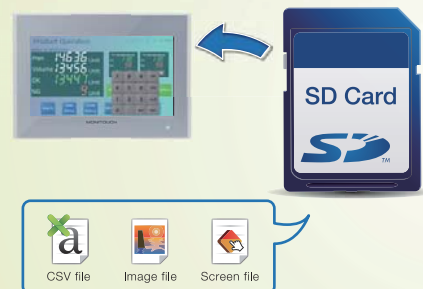
⚙ Packed with Useful Functions

Scheduler

Daily or weekly operation, or operation on a specific date can be set. Operations such as saving of sample data can be scheduled with ease.

Macro execution   CSV output   Bit ON

Compatible with SD Cards

V9 has an SD card interface.

SD Card

CSV file   Image file   Screen file

Screen Transition

15 kinds of functions are available for screen switching and overlapping.

Slide-In
A new screen slides over the current screen.

Box-In
A new screen appears at the center and expands to fill the entire screen.

Swap
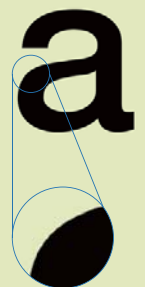A new screen replaces the current screen.

Smooth Font

True type fonts have been added, and the new anti-aliasing function ensures clear expression.

Before smoothing   **After smoothing**

📱 Enhanced Operation and Display Capacity

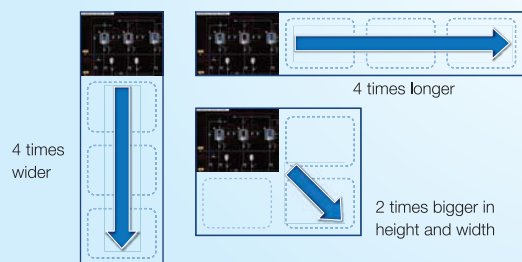## Scrolling Function `The industry's first`

You can view a particular part in close-up while scrolling around the entire screen, enabling a big-picture view and detailed analysis at the same time.

Current position and status can be confirmed instantly using thumbnail images.

▌Versatile Screen Size

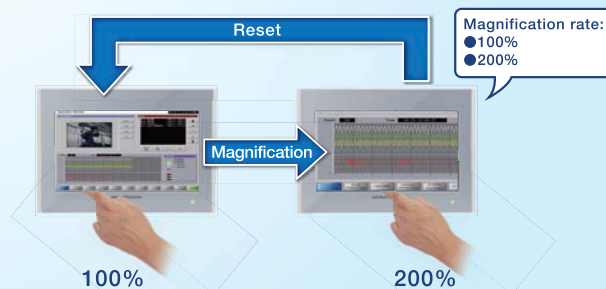Screens can be enlarged in height and width depending on your needs.

4 times longer

4 times wider

2 times bigger in height and width

Scaling Function `The industry's first`

Image can be enlarged up to 150%. The most inaccessible parts can be checked with this function.
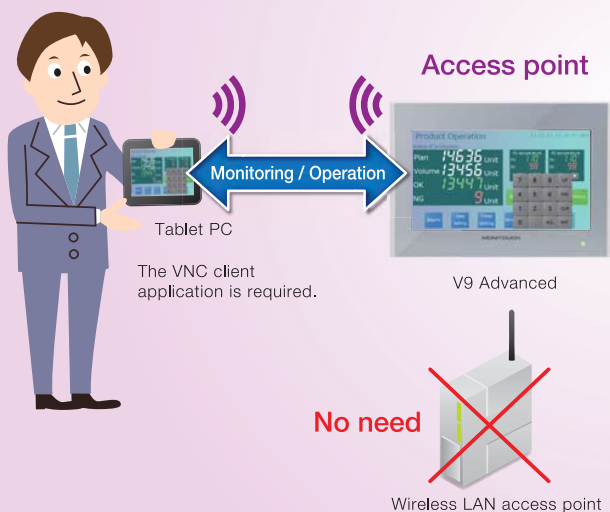
Double tap

▌Magnification to a Desired Size

Image can be scaled up and down by double tapping.

Reset

Magnification rate:
● 100%
● 200%

Magnification

100%

200%
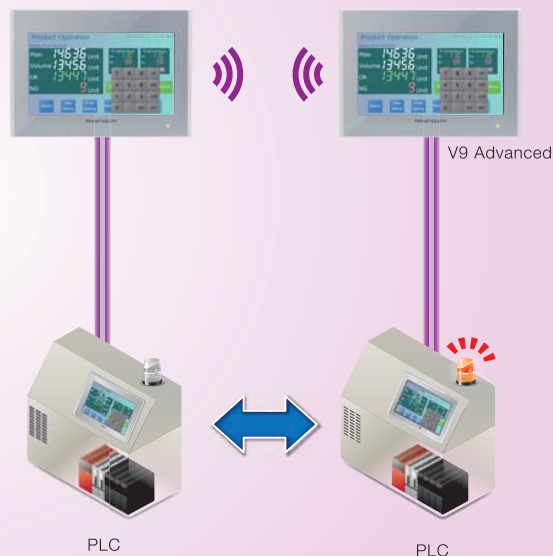

📶 Access from Tablet PC via Wireless LAN

Remote Access to V9

With the VNC server function, V9 can be accessed from a tablet PC running iOS or Android. In addition, the access point function incorporated in V9 enables direct access.
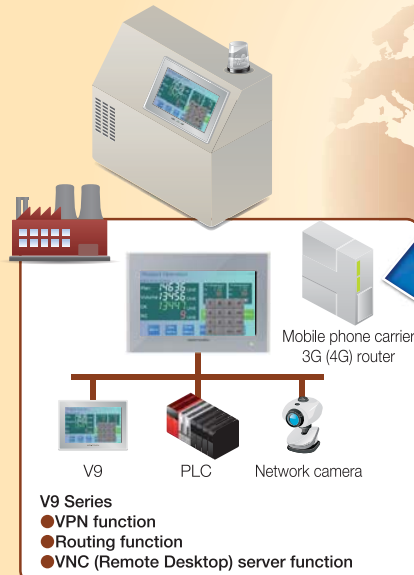
Access point

Monitoring / Operation

Tablet PC

The VNC client application is required.

V9 Advanced

No need

Wireless LAN access point

Data Transmission between Panels

Data can be transferred between devices through V9 as a gateway.

V9 Advanced

PLC

PLC

🌐 VPN

Remote Maintenance with VPN

V9 is fully compatible with VPN, which ensures the security of your network environment. Since V9 Advanced is equipped with a router function, it is possible to control a PLC through V9 remotely via Ethernet.

Production site

Office (Machine manufacturer)

In-house LAN

VPN

Mobile phone carrier
3G (4G) router

V9   PLC   Network camera

V9 Series
● VPN function
● Routing function
● VNC (Remote Desktop) server function

Remote access at low cost
● VPN router is not required.
● V9 has a VPN router function.
● VPN software should be installed on the PC.

Easy remote access
● One click to access to VPN
● Accessible to a local IP address
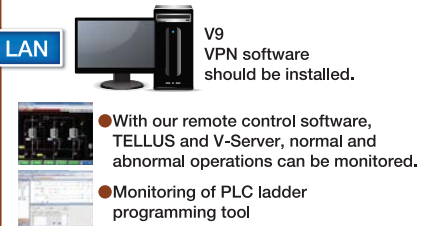● No need for IP masquerade setting

Secure remote access
● VPN protects the system from eavesdropping and falsification.

Remote maintenance from the office
Without visiting production sites, you can perform
● Remote monitoring of a production site
● Remote maintenance of an operation program

V9
VPN software
should be installed.

● With our remote control software, TELLUS and V-Server, normal and abnormal operations can be monitored.
● Monitoring of PLC ladder programming tool

Remote maintenance from outside the office
● VPN software should be installed on the mobile terminal.
● V9 screen in the production site can be displayed elsewhere by installing VNC client software.

☁ Cloud System

Data Utilization through Cloud Server

Operation data is transmitted from V9 in a production site to the cloud server at predetermined intervals. The data saved in the cloud server can be monitored without accessing each terminal.
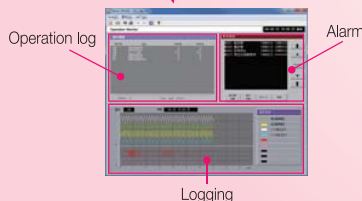
Secure Protection
Provided with a cloud server and a simple application, information such as log data is collected periodically and used for maintenance and the prevention of faults.
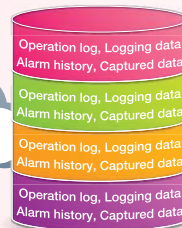
Office (Manufacturer of assembled products)

V-Server EX
Data saved in the cloud server is collected periodically by V-Server EX.

Operation log   Alarm

Logging

Cloud server

Operation log, Logging data
Alarm history, Captured data

Operation log, Logging data
Alarm history, Captured data

Operation log, Logging data
Alarm history, Captured data

Operation log, Logging data
Alarm history, Captured data

Production site A

Production site B

Production site C
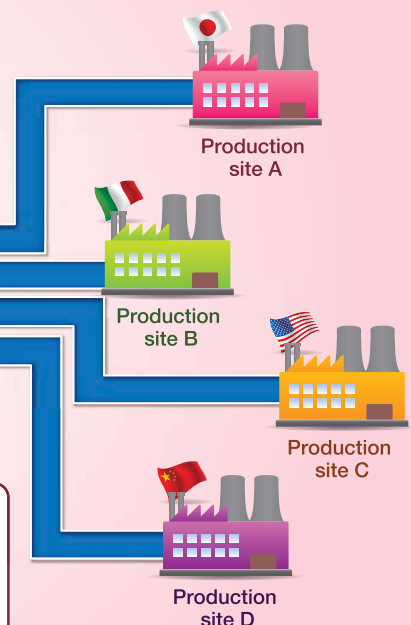
Production site D

**Point 1:
Accumulation of Fault Data**
Accumulated fault information is used for improvement of the know-how and prevention of future incidents.

**Point 2:
Easy Information Collection**
Data can be obtained easily without visiting the site.

V-SFT Ver. 6 Easy Configuration!

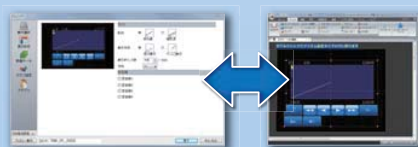## Using fewer steps greatly reduces configuration time.

▍Point 1: Streamlined setting procedures

Setting items are arranged in a flow of processes for easy configuration.

▍Point 2: Visualization

Screen configuration can be confirmed on the preview screen. By switching the display between the preview and setting dialog screens, you can figure out the entire layout even with a low-resolution PC.

Switching between the setting dialog and preview screens

▍Point 3: Variation of parts

Increased number of real and sign parts are now available. You can select from a wide range of user-friendly parts.

See you soon.