Safety Considerations

- For safe operation, read the instruction manual or user manual that comes with the product carefully or consult the distributor from which you purchased the product, before using the product.
- Products introduced in this catalog have not been designed or manufactured for such applications in a system or equipment that will affect human bodies or lives.
- Customers, who want to use the products introduced in this catalog for special systems or devices such as for atomic-energy control, aerospace use, medical use, passenger vehicle, and traffic control, are requested to consult the Hakko Overseas Sales Section.
- Customers are requested to prepare safety measures when they apply the products introduced in this catalog to such systems or facilities that will affect human lives or cause severe damage to property if the products become faulty.
- For safe operation, wiring should be conducted only by qualified engineers who have sufficient technical knowledge about electrical work or wiring.

Notes to consider before purchasing

- Appearance and specifications are subject to modification without prior notice due to technical improvements.
- Colors in the catalog may differ from the actual colors due to printing inaccuracies.
- Consult your distributor or us for further information about products in this catalog.

www.monitouch.com

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Bringing the factory floor to your desk
TELLUS and V-Server links MONITOUCH in a factory with a PC in the office, so that you can remotely collect on-site data or monitor and control the equipment in the factory. This combination enables efficient and low-cost production; immediate and appropriate responses to the condition of the production line is possible from anywhere.

Collection and saving of current data

Linkage of a PC and MONITOUCH via Ethernet enables collection and saving of on-site data in real time.

Remote monitoring and control

Installation of the TELLUS and V-Server software package allows your PC to monitor and control the production site via MONITOUCH through Ethernet.

MONITOUCH functions available on your PC/iPad

Equivalent functions of MONITOUCH are available on your PC or iPad by directly connecting to PLC after installing TELLUS software. It is possible to show a screen image on a large PC display and link various Windows applications. By using on iPad, the control panel becomes portable.

Monitoring the factory from the office enables quick response to changes, improving operating efficiency.
Linking your office and factory for collection of production data

**V-Server**

**Data saving without programming**

**Data logging function**
Production data can be regularly read out and saved in database or CSV/Excel format.

**Readout of sampling data**
Sampling data stored in MONITOUCH can be read out and saved in database or CSV/Excel format.

**Consolidated recipe data management**
Consolidation of recipe data by the host PC reduces the process of recipe registration and modification for each equipment and provides consistent production control.

**Recipe data**
V-Server collects information from peripheral devices through MONITOUCH as a gateway. It is possible to collect information from devices of any manufacturer and model if they can be connected to MONITOUCH.

**Easy to make daily and monthly reports (DDE function)**
The tag data registered in V-Server can be pasted to Excel spreadsheet in DDE format. This makes it easy to generate daily/monthly reports.

**Quick response to on-site problems**
Alarm data can be monitored to display historical data or a list of alarms currently occurring. In addition, an e-mail alert can be sent immediately when a critical alarm occurs.

**Updating of MONITOUCH data from the office**
You can update the system program of multiple MONITOUCH panels at a time or transfer the screen program to them all together.

**Reading and writing of stored data**
Files on a SD card inserted in MONITOUCH can be read out to a PC, and files edited on a PC can be written onto a SD card via Ethernet.

**Automatic actions in response to events**
Various kinds of events can be set depending on the requirements of the operation. Events allow for a high degree of flexibility, so you can adapt to the specifications of the production line.
Remote monitoring and control

**TELLUS - Remote**

**Remote control with excellent cost performance**

Conventional systems require an enormous amount of time and money; expensive equipment and software, exclusive programming by VB, VC, etc. are needed.

**Conventional system**
- SCADA (Software)
- Screen configuration and customization
- Communication unit (PLC)
- High cost!

**TELLUS and V-Server**
- Only installation of low-cost application software is needed.
- The same screen program as for MONITOUCH in production site can be used without making any additional screen program for remote monitoring.
- Low cost!

**Monitoring and control of multiple units by one PC**

TELLUS allows you to control and monitor multiple MONITOUCH panels with a single PC, which helps improve the operating efficiency and the cost-effectiveness.

**Security functions against operation errors**

Security functions such as write-protect are provided to ensure safe and secure system operation.

**Remote control by means of a simple system**

The system is compatible with various systems such as in-house LAN, Internet, WAN, etc.

- **You can access the on-site screen via the Internet from a remote location.**
- **You can monitor overseas plants via WAN.**

*It is necessary to modify the setting of firewall and routing for Internet access.

**Easy selection of peripheral equipment**

It is possible to connect peripheral equipment such as printers and mass storage media that have Windows drivers so that the data can be easily output or saved.

**Large expandability combined with various applications**

Processing of production data such as summary and analysis can be easily conducted using external software.

**Realizing even higher performance with MONITOUCH by integrating PC/iPad into systems**

**TELLUS - HMI iPad**

It enables new applications like controlling multiple machines with a single tablet or wirelessly operating a machine while visually monitoring where best.

*TELLUS-HMI iPad supports only Ethernet TCT/IP communications.

**Install anywhere, even on your palm**

Various applications can be run, including that for viewing a PDF of the troubleshooting manual.

**Shutdown of OS**

OS can be shut down on TELLUS without displaying the shutdown menu.

**Start-up of application**

Various applications can be run, including that for viewing a PDF of the troubleshooting manual.

**Loading and execution of DLL functions**

DLL functions that were made individually can be loaded and executed on TELLUS.
Advantages of using **V-Server**

"I don’t have to bother collecting data any more."

**Real-time collection of on-site production data**

Production data can be collected in real time without distracting workers. Collected data can be used for reviewing production plans and improving production facilities.

**Using collected data to increase production efficiency**

Obtaining on-site information in real time makes it possible to draw up appropriate and efficient production plans.

**Sending reports upon completion of work**

Daily reports are made automatically and accurately to reduce the burden on the production worker and errors.

**Building a database of issues with ease**

Data on operation stops and errors are analyzed to improve production facilities.

Advantages of using **TELLUS-Remote**

"We can shorten the downtime."

**Troubleshooting in the office for quick recovery**

Prompt response to problems is possible by controlling the production equipment remotely. Production efficiency is improved by shortening downtime, and there is no need to spend the time and money required to send a person to the production site.

**Before**

- End-user: Operators can’t identify the cause of the problem and call the manufacturer of the equipment.
- Reporting by telephone

**After**

- End-user: Operators can’t identify the cause of the problem and call the manufacturer of the equipment.
- TEALLUS-Remote: It is easy to find out the cause of the problem by monitoring the same screen as the one on the production site in the office.
- Remote control

**Building a database of issues with ease**

**Input a cause of the operation stop**

**Problem solved**

**Normal operation**

**Significant reduction in time and cost!**

### Advantages of using **TELLUS-HMI**

"I won’t miss a problem in production."

An image of the entire production line can be displayed on one large screen.

- Equipping a PC with MONITOUCH functions makes it possible to have a large, full HD display.
- All operation processes can be displayed on one large screen.
- An image of the entire production line can be displayed on one large screen.

**TELLUS-HMI**

ENGLISH

1.024×768 pixels

MONITOUCH display area

ZERO OVERSIGHT WITH THE EASY-TO-SEE DISPLAY

1,920×1,080 pixels

HMI mode display area

### Additional display only for monitoring is also available.

The dedicated TELLUS screen only for monitoring can be displayed on a large display.

### Run two TELLUS-HMIs and indicate the data on separate displays.

Display (Primary display)

- TELLUS-HMI
- Operation of the primary display does not interfere with the monitoring display.

Display (Monitoring display)

- TELLUS-HMI

### Applicable Models & Operating Environment

#### Applicable Models

- **TELLUS-HMI**
  - TEL05 series
  - TEL10 series

- **TELLUS-Remote**
  - TELR5 series
  - TELR10 series

#### Recommended Operating Environment (PC)

**Monitor:**

- Wide PC/AT compatible with Windows

**OS:**

- Windows 7/8/8.1/10 (32bit, 64bit)
- Windows 7/8/8.1/10 (32bit, 64bit) for MONITOUCH Edition

**CPU:**

- Pentium IV 1GHz or more

**Memory:**

- 256MB or more (when an emulator is used, 512 MB or more)

**Hard disk:**

- When TELLUS installed 2.5 GB or more
- When V-Server installed 2.5 GB or more

**Display:**

- Resolution: XGA 1,024×768 or more
- Colors: High Color 16 bit or more

#### Applicable models

- Use iPads of the model and system versions shown below.

#### Recommended Operating Environment (iPad)

**License Types**

One license is required for each device. There are five types of licenses for different uses (License framed in red is equivalent to one license).  

**License Validation**

- Password validation
- USB license key

#### License Validation

License validation is restricted to one license per device. There are five types of licenses, one for each function (See above). Check the type of license for the function(s) you wish to use it for.

Notes:

- When reinstalling the application software on the same computer, the same password is valid. However, if you initialize the OS or change the device to use the application software, the password becomes invalid. In this case, you must go through the license validation procedure again to get a new password.
- *Excluding the cases of using a USB license key*
### PLC models compatible with TELLUS

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Models</th>
<th>TS series</th>
<th>Y series</th>
<th>TELLUS Ver.4</th>
<th>TELLUS Ver.3</th>
</tr>
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<tbody>
<tr>
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<td>V-Server</td>
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<td>Remote</td>
<td>Remote</td>
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<td>Supported</td>
<td>Not supported</td>
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<td>Note 1: TELLUS HMI does not support Multi-link or Multi-link2 connection.</td>
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<td>Note 2: PLC_CTL macro command is not available for Remote mode.</td>
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<td>***1: Drivers that do not support 1:1 communication, the message &quot;Remote mode not supported&quot; is prompted. In such case, force to proceed.</td>
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<td>***2: In case Event Setting in V-Server is &quot;Trigger: Memory, Type: Bit&quot;, upper bits in a double-word (bit 16 to 31) are not available.</td>
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<td>***3: Monitoring STRING type is not available.</td>
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</table>
Temperature controllers, Servos and Inverters compatible with TELLUS

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Models</th>
<th>5V series</th>
<th>12V series</th>
<th>T53080</th>
<th>VT series</th>
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</thead>
<tbody>
<tr>
<td>TELLUS</td>
<td>TS2060</td>
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<td>HMI</td>
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<td>V7 series</td>
<td>TELLUS</td>
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<td>HMI iPad</td>
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<td>V-Server</td>
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*Note: *VT* series models are suitable for remote control.*

*Models: TELLUS - Remote, V-Server*