GT14 Handy GOT General Description

No. Name Specifications
---
1. Features
   - Multiple languages can be displayed using the selected 16 languages and fonts.
   - In addition, Touch Panel can be used to operate the system.

2. Back Panel
   - Environmental protection back cover
   - External connection side (connector type: MINI-B)

2.1 Front Panel
   - Environmental protection cover
   - Internal environmental protection cover

---

**Notes for compliance to EMC regulation**

1) Incorrect operation of the touch switch(s) may lead to a serious accident if the touch switch(s) is located around the center of the touched point, if any, may operate.

2) The software incorporated into the User's Manual is subject to change without notice. Always refer to the User's Manual before using the product, and consult with our local distributor if any questions arise.

3) The cables connected to the unit must be run in ducts or clamped. Not doing so can cause the unit or cable to be damaged due to the dangling, motion or accidental pulling of the cables or can cause a malfunction due to a frequency magnetic field.

4) The operation at the IP address duplication depends on the devices and the network configurations used. For more details please contact the local Mitsubishi Electric sales site.

---

3) General notes on the use of communication cables

**Notes for compliance to EMC regulation**

1) Incorrect operation of the touch switch(s) may lead to a serious accident if the touch switch(s) is located around the center of the touched point, if any, may operate.

2) The software incorporated into the User's Manual is subject to change without notice. Always refer to the User's Manual before using the product, and consult with our local distributor if any questions arise.

3) The cables connected to the unit must be run in ducts or clamped. Not doing so can cause the unit or cable to be damaged due to the dangling, motion or accidental pulling of the cables or can cause a malfunction due to a frequency magnetic field.

4) The operation at the IP address duplication depends on the devices and the network configurations used. For more details please contact the local Mitsubishi Electric sales site.

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**WIRING PRECAUTIONS**

- The POWER LED flickers (green/orange) and the monitor screen appears
- The operation performance is improved by the analog touch panel.
- Connecting the battery correctly. Do not discharge, disassemble, heat, short, power externally in all phases. Not switching the power off in all phases can cause an accident. An independent and redundant hardware or mechanical interlock is required to perform any significant operation to the system.
- The operation at the IP address duplication depends on the devices and the network configurations used. For more details please contact the local Mitsubishi Electric sales site.

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**STARTUP/MAINTENANCE**

- The STOP LED is turned off.
- The operation at the IP address duplication depends on the devices and the network configurations used. For more details please contact the local Mitsubishi Electric sales site.

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**Precautions for using communication cables**

- Always turn off the power ON/OFF switch on the connector conversion box before wiring. Failure to do so may result in an electric shock, product damage or malfunction.
- Always turn off the power ON/OFF switch on the connector conversion box before wiring. Failure to do so may result in an electric shock, product damage or malfunction.
- The cables connected to the unit must be run in ducts or clamped. Not doing so can cause the unit or cable to be damaged due to the dangling, motion or accidental pulling of the cables or can cause a malfunction due to a frequency magnetic field.
- The operation at the IP address duplication depends on the devices and the network configurations used. For more details please contact the local Mitsubishi Electric sales site.

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For details please contact the local Mitsubishi Electric sales site.
**GT14 Handy GOT General Description**

This manual describes the functions, dimensions, installation, and usage of the GT14 Handy GOT (hereafter referred to as the "GOT"), which is a powerful touch panel controller. It is designed for Windows-based PCs and is equipped with a large 4.3-inch color display (240 dots x 240 dots), TFT color (65536 colors), built-in high-speed CPU, and up to 8MB RAM, allowing for efficient data processing and an enriched user experience. The GOT is designed to be used in various control environments, including industrial automation, process control, and machine monitoring. This manual provides detailed instructions on how to install, use, and maintain the GOT to ensure optimal performance and efficiency.

**1. Features**

- **Windows-based interface:** The GOT is compatible with Windows-based PCs, allowing for a seamless integration into existing systems. The GOT provides a user-friendly interface that is easy to navigate and use.
- **Large color display:** The 4.3-inch color display offers a high-resolution (240 dots x 240 dots) screen that ensures clear and vivid graphics, making it easier to access and interpret data.
- **High-speed processing:** The GOT is equipped with a powerful CPU and up to 8MB RAM, which enables fast data processing and smooth operation.
- **Flexible connectivity:** The GOT supports various communication interfaces, including Ethernet and USB, allowing for versatile connectivity options.
- **Extensive software support:** The GOT is compatible with a range of software tools and protocols, such as Mitsubishi's GT Designer3 software, which simplifies the setup and configuration process.

**2. Part Name**

- **2.1 Front Panel**
  - **Environmental protection box cover closed**
  - **Environmental protection box cover open**

- **2.2 Back Panel**
  - **Environmental protection box cover closed**
  - **Environmental protection box cover open**

- **2.3 Top Face (interface)**
  - **Environmental protection box cover closed**
  - **Environmental protection box cover open**

**3. Notes on power supply**

- **Equipment with no voltage power supply:** The equipment with no voltage power supply is to be used in indoor environments. The power supply is designed to meet the requirements of IEC61131-2: 2007, and CE marking has been confirmed. Power consumption is maximally 240 (W).

**4. Compliance with EMC directive (CE Mark)**

- **Equipment with no voltage power supply:** The equipment with no voltage power supply is to be used in indoor environments. The power supply is designed to meet the requirements of IEC61131-2: 2007, and CE marking has been confirmed. Power consumption is maximally 240 (W).
### 3. Specifications

#### 3.1 General Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating ambient temperature</td>
<td>5°C to 40°C (non-condensing)</td>
</tr>
<tr>
<td>Installable temperature</td>
<td>-10°C to +50°C (non-condensing)</td>
</tr>
<tr>
<td>Operating altitude</td>
<td>500m or less</td>
</tr>
<tr>
<td>Installation method</td>
<td>Wall mounting</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Width: 270 mm, Height: 140 mm, Depth: 40 mm</td>
</tr>
</tbody>
</table>

#### 3.2 Performance Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulation resistance</td>
<td>10MΩ</td>
</tr>
<tr>
<td>Dielectric withstand voltage</td>
<td>500V DC for 1 minute (across power supply terminals and earth)</td>
</tr>
<tr>
<td>Storage ambient humidity</td>
<td>10 to 90% RH, non-condensing</td>
</tr>
<tr>
<td>Operating ambient humidity</td>
<td>10 to 90% RH, non-condensing</td>
</tr>
<tr>
<td>Input power supply voltage</td>
<td>24V DC (+10% -15%)</td>
</tr>
<tr>
<td>Power consumption</td>
<td>8.4W or less (350mA/DC24V)</td>
</tr>
<tr>
<td>Shock resistance</td>
<td>Conforms to JIS B3502, IEC 61131-2 (147 m/s², 3 times each in X, Y and Z directions)</td>
</tr>
</tbody>
</table>

#### 3.3 Power Supply Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply voltage</td>
<td>24V DC ±10% or ±5%</td>
</tr>
<tr>
<td>Power consumption</td>
<td>8.4W or less (350mA/DC24V)</td>
</tr>
<tr>
<td>Internal battery</td>
<td>GT14 Handy GOT lithium battery</td>
</tr>
<tr>
<td>Maximum load</td>
<td>1A/24VDC (resistance load), 0.3A/24VDC (induction load)</td>
</tr>
</tbody>
</table>

#### 3.4 External Dimensions

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>270 mm</td>
</tr>
<tr>
<td>Height</td>
<td>140 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>40 mm</td>
</tr>
</tbody>
</table>

### 4. Daily Inspection

#### 4.1 Daily Inspection

<table>
<thead>
<tr>
<th>No.</th>
<th>Inspection Item</th>
<th>Criteria</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Connection screws</td>
<td>Loose or bent</td>
<td>Retighten screws</td>
</tr>
<tr>
<td>2</td>
<td>Terminal blocks</td>
<td>Loose or bent</td>
<td>Retighten screws</td>
</tr>
<tr>
<td>3</td>
<td>Battery</td>
<td>No battery</td>
<td>Replace with new battery</td>
</tr>
</tbody>
</table>

#### 4.2 Periodic Inspection

<table>
<thead>
<tr>
<th>No.</th>
<th>Inspection Item</th>
<th>Frequency</th>
<th>Criteria</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Insulation resistance</td>
<td>Yearly</td>
<td>10MΩ</td>
<td>---</td>
</tr>
<tr>
<td>6</td>
<td>Power supply input</td>
<td>Yearly</td>
<td>24V DC ±10%</td>
<td>---</td>
</tr>
<tr>
<td>7</td>
<td>Battery</td>
<td>Yearly</td>
<td>No battery</td>
<td>Replace with new battery</td>
</tr>
</tbody>
</table>

### 5. Precautions

#### 5.1 Cautions on Using Emergency Stop Switch

1. When using the emergency stop switch in the safety system, ensure the validity of the emergency stop function is evaluated in accordance with the safety standards in use.
2. When using the parallel circuit switch, the emergency stop switch should be compared to the emergency stop switch in the safety system, as well as the emergency stop switch in the safety system, and then ensure the validity of the emergency stop switch function.
3. In case of long-term use, the emergency stop switch may be affected by voltage drops or other factors, so it is recommended to check the function periodically.

#### 5.2 Cautions on Using Battery

1. Ensure the battery is fully charged before use and is replaced when necessary.
2. Do not dispose of batteries in the trash; dispose of them according to local regulations.
4. Do not short-circuit the battery terminals.

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*This table is for reference only.*

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*For safe use*
3. Specifications

3.1 General Specifications

3.1.1 Dimensions

3.1.2 Power Specifications

3.1.3 Other Specifications

3.2 Performance Specifications

3.2.1 Specifications

3.3 Power Supply Specifications

3.4 External Dimensions

4. Maintenance and Inspection

4.1 Daily Inspection

4.2 Periodic Inspection

4.3 Battery Replacement

5. Precautions

For safe use

MTSUISU ELECTRIC CORPORATION
**Remark**

**Specifications**

**Name**

3) General notes on Power supply

Depending on circumstances, procedures indicated by "CAUTION" may also be indicated by "WARNING".

**Before using this product, please read this manual and the relevant manuals thoroughly:**"Safety Precaution" (Read these precautions before using.)

- Trademarks, unless otherwise noted, are the registered trademarks or trademarks of each company.
- Unicode, Inc. is the registered trademark of Unicode, Inc. in the United States and other countries. The company name and product names are trademarks or registered trademarks of their respective companies. The product name to be described in this manual is the registered trademark name of the corresponding company.

- Do not use the control and communication cables with internal power sources (GT14H-C200-42P, GT14H-C400-42P, etc.) at an altitude of more than 2,000 m above sea level.
- When connecting GT Works3/GT Designer3 to the Controller (including GT14 HANDY (GT1455HS-QTD BE series, GT1450HS-QMBDE series)) before connecting or disconnecting the GOT to it.

- Before using the product, please read the manual and the relevant manuals thoroughly. Be sure to read the manual thoroughly for the product that you intend to use. Always forward it to the end user.

- The manual in PDF format is included in the GT Works3/GT Designer3 installation package. For more details about the PDF format, please see the local Mitsubishi Electric website. Before using the product, please read this manual and manuals of relevant products thoroughly. Before use, read this manual and manuals of relevant products thoroughly.

- Incorrect operation of the touch switch(s) may lead to a serious accident if the touch switch is included in an emergency stop function or in an electric control function. Be sure to take sufficient safety measures according to the system configuration.

- Exceeding the breakdown voltage of the product may cause the product to fail or malfunction.

- The unit may be damaged by the build-up of static electricity. Please take safety measures to prevent static electricity. For more details about the PDF format, please see the local Mitsubishi Electric website.

- Compliance to EMC directive for the entire mechanical module should be checked by the user/manufacturer. For more details please contact the local Mitsubishi Electric representative.

**Design precautions**

- Important specifications of the GOT are shown in "CAUTION" and "WARNING" sections. Always refer to them when using the product.

- The display section may be damaged due to the dangling, impact, or physical damage.

- When unplugging the cable connected to the unit, do not hold and pull the cable directly. For more details about the PDF format, please see the local Mitsubishi Electric website.

- Connect connection cables securely to the specified connectors while the power of the unit is turned OFF. Not doing so can cause a short circuit or malfunction due to the damage of the connector.

- The product is a precision product. In order to ensure its performance and reliability, please handle it with care. For more details about the PDF format, please see the local Mitsubishi Electric website.

- When programs or parameters of the controller (such as a PLC) that is monitored are changed, be sure to reset the GOT in advance.

- "CAUTION" and "WARNING" indicate important precautions and safety points that are necessary for using the product. Always refer to them when using the product.

- The maximum temperature of the unit is approximately 60°C. Be sure to provide sufficient heat dissipation measures. For more details about the PDF format, please see the local Mitsubishi Electric website.

- Before using the product, please read this manual and the relevant manuals thoroughly. Before use, read this manual and manuals of relevant products thoroughly. Always forward it to the end user.

- Always forward it to the end user. Be sure to take sufficient safety measures according to the system configuration.

- The unit may be damaged by the build-up of static electricity. Please take safety measures to prevent static electricity. For more details about the PDF format, please see the local Mitsubishi Electric website.

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### 3. Specifications

#### 3.1 General Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Operating condition</th>
<th>Storage condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating ambient temperature</td>
<td>0°C to 50°C, non-condensing</td>
<td>-25°C to 70°C, non-condensing</td>
</tr>
<tr>
<td>Storage ambient temperature</td>
<td>0°C to 60°C, non-condensing</td>
<td>-40°C to 80°C, non-condensing</td>
</tr>
<tr>
<td>Installation environment</td>
<td>Indoor, 0°C to 40°C, non-condensing</td>
<td>Indoor, 0°C to 40°C, non-condensing</td>
</tr>
</tbody>
</table>

#### 3.2 Performance Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display area</td>
<td>145 (5.71&quot;) x 145 (5.71&quot;)</td>
</tr>
<tr>
<td>Display resolution</td>
<td>265,728 pixels</td>
</tr>
<tr>
<td>Response time</td>
<td>6.0ms (max)</td>
</tr>
<tr>
<td>Brightness</td>
<td>400 [cd/m²]</td>
</tr>
<tr>
<td>Contrast ratio</td>
<td>100:1</td>
</tr>
</tbody>
</table>

#### 3.3 Power Supply Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input power supply voltage</td>
<td>24V DC (+10% -15%)</td>
</tr>
<tr>
<td>Output current</td>
<td>0.3A/24VDC (induction load)</td>
</tr>
<tr>
<td>Life</td>
<td>100,000 times</td>
</tr>
</tbody>
</table>

#### 3.4 External Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (W)</td>
<td>145 (5.71&quot;)</td>
</tr>
<tr>
<td>Height (H)</td>
<td>204 (8&quot;)</td>
</tr>
<tr>
<td>Depth (D)</td>
<td>45 (1.77&quot;)</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 0.79kg (GT14 Handy main unit only)</td>
</tr>
</tbody>
</table>

### 4. Daily Inspection

#### 4.1 Daily Inspection

<table>
<thead>
<tr>
<th>No.</th>
<th>Inspection Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Installation status of GOT</td>
<td>Visual check</td>
</tr>
<tr>
<td>2</td>
<td>Connection quality of terminal block</td>
<td>Visual check</td>
</tr>
<tr>
<td>3</td>
<td>Connection quality of terminal block</td>
<td>Visual check</td>
</tr>
<tr>
<td>4</td>
<td>Connection quality of terminal block</td>
<td>Visual check</td>
</tr>
</tbody>
</table>

#### 4.2 Periodic Inspection

<table>
<thead>
<tr>
<th>No.</th>
<th>Inspection Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accumulated voltage</td>
<td>Measure with insulation resistance tester (across power supply terminals and earth)</td>
</tr>
<tr>
<td>2</td>
<td>Internal battery</td>
<td>Check if the battery condition is normal with the utility</td>
</tr>
<tr>
<td>3</td>
<td>Basic operation</td>
<td></td>
</tr>
</tbody>
</table>