GT14 General Description

Linked to serious results. Depending on circumstances, procedures indicated by “CAUTION” may also be used.

Specifications

- Rating plate
- SD card
- GT Designer3

MONITORING PRECAUTIONS

- Do not press the GOT display section with a pointed material as a pen or driver.
- When disposing of the product, handle it as industrial waste.
- MOUNTING PRECAUTIONS
- Do not press the GOT display section with a pointed material as a pen or driver.
- When disposing of the product, handle it as industrial waste.

NON-DESTRUCTIVE PRECAUTIONS

- Designating the safety symbol and the user caution

1. Features

- Monochrome display
- Battery
- Display section
- Touch panel
- Fusion panel
- Connectivity

2. Part Name

2.1 Front

- Display screen
- Touch panel
- Power terminal
- I/O terminal
- LED display

3. Specifications

3.1 General Specifications

- Operating power temperature
- Memory capacity

3.2 Performance Specifications

- Display resolution
- System capacity
- Memory size

4. Associated Manuals

- GT Designer3 Design Manual
- GT Designer3 Design Manual (For GOT1000 series)
- GT14 User’s Manual

For the PC connections, refer to the following:
- GT14 User’s Manual
GT1455-QTBD(E), GT1450-QMBD(E)  
GT1450-QLBD(E)

**GT14 General Description**

This manual describes the product series, including mounting, wiring, and specifications. The product series includes a GOT (Graphic Operation Terminal) series for industrial equipment control. This manual includes installation, operating instructions, and maintenance information. Please read this manual thoroughly before using the product.

**Safety Precautions**

- Always ensure that the power supply is disconnected before handling the product. Failure to do so can result in electrical shock or damage to the product.
- Do not touch the power supply terminals or wires with wet hands, as this can lead to electrical shock.
- Use the power supply specified in the product specifications. Using an incorrect power supply can cause overheating or damage to the product.

**Specifications**

- **Model**: GT1455-QTBD(E), GT1450-QMBD(E), GT1450-QLBD(E)
- **Diagonal Size**: 5.7" diagonal
- **Screen Size**: 5.7"
- **Resolution**: 320 x 240 pixels
- **Contrast Ratio**: 800:1
- **Brightness**: 350 nits
- **Response Time**: 0.08 s
- **Operating Temperature**: -10 to 50°C
- **Storage Temperature**: -20 to 60°C
- **Relative Humidity**: 5 to 95% non-condensing
- **Power Supply**: DC 24 V
- **Power Consumption**: 6 W max.
- **Dimensions**: W169 x H115 x D98 mm
- **Weight**: 0.38 kg

**Functionality**

- **Connector**: 2 x USB, 1 x RS-232, 1 x RS-422/485
- **Interface**: Ethernet, USB, RS-232, RS-422/485
- **Communications**: TCP/IP, EtherCAT, OPC-UA
- **Display**: 16-dot standard font, 20 characters
- **Battery**: Ni-MH battery, approximately 70,000 hours life
- **Memory**: 9 MB flash memory

**Operation**

- **Start-up**: 320 ms max.
- **Communication**: 100 Mbps max.
- **Ethernet**: RJ-45 connector
- **USB**: USB 2.0, USB 3.0 compatible
- **Memory Card**: SD card

**Environment**

- **Operating Altitude**: 2000 m max.
- **Pollution Degree**: 2 or less
- **Cooling Method**: Self-cooling
- **Installation Location**: Inside control panel

**Maintenance**

- **Cleaning**: Use a soft, dry cloth for cleaning the display screen.
- **Disposal**: Follow local regulations for disposal of electronic waste.

**Additional Information**

- **User's Manual**: Refer to the user's manual for detailed instructions and specifications.
- **Technical Support**: Contact us for technical support and assistance.

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**Table of Contents**

- 1. Features
- 2. Part Name
- 3. Specifications
- 4. Operation
- 5. Environment
- 6. Maintenance
- 7. Additional Information
3) Fixing the GOT

The panel thickness should be within 2 to 4mm.

4.3 Mounting Position

For details of CE marking, refer to the following.

- ※1 Within 5ms
- ※2 Gradation inversion is a characteristic of liquid crystal displays.
- ※3 Using the GOT Backlight OFF function can prolong the life of the backlight.
- ※4 The touch panel is analog resistive film-type. If you touch the panel with two fingers, the point at which either panel may operate. Do not touch the panel in 2 points or less at the same time.
- ※5 Compliant with IP67 when the USB environment protection cover is attached. Not compliant when a USB cable is connected. Note that this does not comply with Japanese laws.
- ※6 Set the terminating resistor selector switch of the GOT in accordance with the application (forming a technical construction file) to the notification of CE marking.
- ※7 Control number

Note that this symbol mark is for China only.

- "C" is used to denote the product is not contained in the scope of CE marking.
- "O" is used to denote the product is contained in the scope of CE marking.

#### Appendix

GOT panel thickness may appear on the surface of the most internal part of the product. Please note that these phenomena appear due to characteristics of the material used in the product and are not caused by product defect.

#### 5. Wiring

5.1 Power Supply Wiring

Please refer to the following technical construction file for the power supply wiring connections to the terminal block of the GOT as shown in the figure.

- ※1 Use 3P flat cable for power supply, 2P flat cable for communication, 8P flat cable for sensor and actuator, 12P flat cable for sensor, actuator and output, etc.

#### 6. Maintenance and Inspection

6.1 Battery Replacement

Basic maintenance checks should be performed periodically. The battery lifespan is 5 years and L220-S2 is 60,000 hours. During this period, the battery should be replaced if necessary.

Please refer to the following technical construction file for the battery replacement procedures and the period of inspection.

1. Rechargeable battery

- ※1 Rechargeable battery: Maintenance-free battery

6.2 Battery Life

The got is equipped with a lithium-ion rechargeable battery. The battery's life is approximately 1500 charge and discharge cycles. When the battery is no longer charged, it may not be possible to turn on the GOT. If the battery cannot be charged, please contact your local MITSUBISHI ELECTRIC representative.

Please refer to the following technical construction file for the battery replacement procedures and the period of inspection.

1. Rechargeable battery

- ※1 Rechargeable battery: Maintenance-free battery

6.3.1 Notes regarding the use of SOT units

1. General notes on the use of communication cables

- ※1 Communication cables should be attached to the 25 P1 connector when using the GOT inside to an external computer.

#### 8. Certification of UL, cUL standards

- ※1 UL/CSA compliance can also be notified by using the UL/CSA marking.

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**Product Information:**

- **Model:** GT14
- **Application:** Programmable Controller
- **Power Supply:** DC 5V, 24V
- **Communication Interface:** RS-232, RS-422/485
- **Screen Size:** 121mm x 80mm
- **Touch Panel:** Resistive film-type

**Technical Specifications:**

- **Input:≤ 40V, 1A**
- **Output:** ≤ 28V, 2A
- **Power Consumption:**
  - Standard: 6.72W (280mA/24VDC) or less
  - High: 7.44W (310mA/24VDC) or less
- **Dimensions:** 121mm x 80mm x 6.8mm
- **Weight:** 135g

**Safety Information:**

- **CE Marking:** Compliant with low voltage directive 2014/35/EU and EMC directive 2014/30/EU.
- **UL/CSA:** Compliant with UL508A.

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**Deterioration of the display color: The display color may seem like it has changed. Please note that it is due to its characteristic.**

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**Note:** The customer must evaluate performance of the final product and unit with the EMC directive.
4.3 Power Supply Specifications

**Frequency**
- 50 Hz
- 60 Hz

**Power supply**
- Power supply voltage: 220 V AC
- Power consumption: 12 W

**Input current (at 25°C)**
- 1.4 A

**Terminal voltage**
- 5 V ± 10% (external)
- 0 V ± 10% (internal)

**Power supply**
- Power supply voltage: 220 V AC
- Power consumption: 12 W

**Input current (at 25°C)**
- 1.4 A

5. Wiring

### 5.1 Power Supply Wiring

1. Connect the power supply cable to the power terminals on the back panel of the GOT.

2. Use the cable of 2mm² or more for grounding.

3. Connect the power supply to the power terminals on the back panel of the GOT.

4. Use the cable of 2mm² or more for grounding.

5. Use the cable of 2mm² or more for grounding.

### 5.2 Control Panel Dimensions

#### 4.1 Control Panel Inside Dimensions for Mounting GOT

1. For the control panel, the control panel can be used in the following control panel inside dimensions.

#### 4.2 Panel Cutting Dimensions

1. Measure the panel and cut it to the dimensions as shown in the diagram below. The panel will be fixed with the GOT.

### 6. Maintenance and Inspection

#### 6.1 Battery Replacement

1. Remove the terminal of the new battery to make sure the terminal of the battery is connected correctly.

2. Connect the power supply to the power terminals on the back panel of the GOT.

3. Use the cable of 2mm² or more for grounding.

### 7. Notification of CE marking

1. The GOT has CE marking. The marking is shown on the back panel of the GOT.

2. The marking is shown on the back panel of the GOT.

### 8. Certification of UL, cUL standards

1. UL Listed

2. cUL Listed

### 4.4 Control Panel Inside Temperature and Mounting Angle

1. For the control panel, the control panel can be used in the following control panel inside dimensions.

#### 4.1 Dimensions

<table>
<thead>
<tr>
<th>Component</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Depth (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOT</td>
<td>135 (5.32&quot;)</td>
<td>140 (5.52&quot;)</td>
<td>25 (0.98&quot;)</td>
</tr>
<tr>
<td>GOT</td>
<td>135 (5.32&quot;)</td>
<td>140 (5.52&quot;)</td>
<td>25 (0.98&quot;)</td>
</tr>
</tbody>
</table>

#### 4.2 Control Panel Dimensions

1. The control panel can be used in the following control panel inside dimensions.

2. The control panel can be used in the following control panel inside dimensions.

### 4.3 Mounting Position

1. Mounting Position

2. Mounting Position

### 4.4 Control Panel Inside Temperature and Mounting Angle

1. Control Panel Inside Temperature

2. Mounting Angle

### 4.5 Installation Procedure

1. Installation Procedure

2. Installation Procedure

### 4.6 Connection and Cables

1. Connection and Cables

2. Connection and Cables

### 4.7 Accessories

1. Accessories

2. Accessories

### 4.8 Specifications

1. Specifications

2. Specifications
GT14 User’s Manual

1. General Description

1.1 GT14 General Description

This manual describes the part names, dimensions, mounting, and specifications of the GOT1000-E series. Please read this manual in the registered order and in its entirety. Also, store this manual in a safe place so that you can take it out and read it whenever necessary.

1.2 Hints when reading this manual

- Specifications are subject to change without notice.
- Specifications related to the type of screen, including the operational environment, are different for each type of screen. Please refer to the screen-type illustration section of this manual for details.
- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

2. Specifications

2.1 Front

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

2.2 Back/Bottom

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

3. Precautions

3.1 General Precautions

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

3.2 Precautions for Better Use

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

4. Planning and Design Precautions

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

5. Wiring Precautions

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

6. Disposal Precautions

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

7. Maintenance

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

8. Specifications

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

9. Associated Manuals

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.

10. Related Publications

- This manual is for use with the GOT1000-E series. Specifications related to the type of equipment, including the operational environment, are different for each type of equipment. Please refer to the equipment-type illustration section of this manual for details.
- In the event of a malfunction or problem, contact your nearest service center or distributor.
4.3 Mounting Position

When mounting the GOT, be sure to leave room on the right side for a depth of at least 140 mm (5.5") in order to fit the GOT cassette when it is detached.

When mounting the control panel, use the control panel (Item No: 160) shown in the diagram. Make holes in the panel according to the dimensions list below.

Referenced Standard: GB/T15969.2

4.4 Control Panel Inside Temperature and Mounting Angle

When mounting the panel, be sure it is mounted at a temperature between 0°C to +70°C (32°F to +158°F) and a relative humidity of 30% to 90% (non-condensing).

Be sure to consider the point of view and the viewing angle in the panel when mounting the panel.

4.5 Installation Procedure

1. Connect the GOT to the bottom panel as shown in the diagram. Mount the GOT by referring to the procedure below. For other mounting instructions, refer to Section 2.4.3 for details on how to mount the GOT. Note: The GOT will not fit into the cabinet if it is mounted at a temperature below 1°C (33.8°F) or above 70°C (158°F).

2. Connect the GOT to the connector on the bottom panel (Item No: 200) as shown in the diagram. Mount the GOT by referring to the procedure below. For other mounting instructions, refer to Section 2.4.3 for details on how to mount the GOT. Note: The GOT will not fit into the cabinet if it is mounted at a temperature below 1°C (33.8°F) or above 70°C (158°F).

3. Connect the GOT to the connector on the bottom panel (Item No: 200) as shown in the diagram. Mount the GOT by referring to the procedure below. For other mounting instructions, refer to Section 2.4.3 for details on how to mount the GOT. Note: The GOT will not fit into the cabinet if it is mounted at a temperature below 1°C (33.8°F) or above 70°C (158°F).

4. Mount the GOT to the bottom panel (Item No: 200) as shown in the diagram. Mount the GOT by referring to the procedure below. For other mounting instructions, refer to Section 2.4.3 for details on how to mount the GOT. Note: The GOT will not fit into the cabinet if it is mounted at a temperature below 1°C (33.8°F) or above 70°C (158°F).

5. Wiring

5.1 Power Supply Wiring

When connecting the power supply, be sure to use the printer power wire. If you use the printer power wire, you may not be able to use this product.

6. Maintenance and Inspection

6.1 Battery Replacement

When replacing the battery, be sure to use a new battery. If you use a used battery, the data stored in the battery may not be retained even if the battery is installed.

7. Notification of CE marking

The product is classified into 3 categories based on the (en) product classification. For CE marking, use the following symbols.

8. Certification of UL, cUL standards

The product is classified into 3 categories based on the (en) product classification. For CE marking, use the following symbols.

Note: This symbol mark is for China only.