GT11 Handy GOT General Description

1. Features

- Single-level monitoring and performance conveyance to PLC devices.
  - Various types of displays: matrix displays, emissive displays, and display panels in the microprocessor display. The displays are used to display the operating status.
  - High-speed monitoring through high-speed communication at maximum of 115.2kbps.
  - High-speed display and high-speed touch switch input.
  - Various input interfaces, including a touch panel for both single-click and drag-and-drop operations.

- Machine interface digital input and output using RS-422/485. The machine interface consists of four digital output points and four digital input points.

- High-speed data communication, which uses RS-422/485 with a maximum of 115.2kbps.

- Internal USB memory (capacity: 3MB, sold separately)

- Multiple languages are supported: English, Spanish, and other languages can be selected.

2. Part Name

2.1 Front Panel

- Function board GT11-100020B (sold separately)
  - Additional feature of the front panel: Programmable Operation Switch (8 switches, independent contact)

- Front panel specifications
  - Dimensions: 180mm (W) x 135mm (H) x 60mm (D)
  - Weight: 1.2kg

- Environmental specifications
  - Temperature: 5 to 40°C (operating)
  - Humidity: 20 to 85% (non-condensing)

3. Specifications

3.1 General Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>+12VDC, 1.5A</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>115.2kbps</td>
</tr>
<tr>
<td>Resolution</td>
<td>256x128 pixels</td>
</tr>
<tr>
<td>Display type</td>
<td>LCD</td>
</tr>
<tr>
<td>Display size</td>
<td>5 inch</td>
</tr>
</tbody>
</table>

- Operating system
  - GT Designer3 Version1 (Windows)

- Input/Output interface
  - RS-232, RS-422, RS-485

- Communication interface
  - USB (2.0), Ethernet (10/100BaseT)

- Power LED
  - Lit in green: Power is correctly supplied
  - Lit in orange: Power is not correctly supplied

- Display types
  - LED, LCD

- Memory card interface
  - CF card (capacity: 2GB, sold separately)

- Reset switch
  - Turquoise LED flickers (green/orange) and the monitor screen appears in the reset mode, who then tries to release the GOT from this mode by touching the blank, while the input of the touch switch(s) remains active.

- WIRING PRECAUTIONS
  - Correctly wire the GOT power supply section after confirming the rated voltage is the same as the power supply power supply used by the system.
  - When connecting cables, pay attention to the contents described in this section.
  - When installing the option function board or battery, or operating the reset switch, be sure to shut off all phases of the external power supply used by the system. Otherwise, the system may be damaged.
  - Especialy, attach the rear cover so that PCBs inside the Handy GOT are not exposed. Doing so can cause the unit to fail or malfunction.

- PRECAUTIONS
  - When power is on, do not touch the terminals.
  - During test operation, never change the data of the devices which are used to control the system by using the switches of a device other than the GOT. Not doing so can cause an accident due to false output or malfunction.

- Associated Manuals

- GT Designer3 Version1 Screen Design manual
- GT11 Handy GOT General Description (This manual)
- GT Designer3 Version1 Programming manual
- GT Designer3 Version1 Programming manual (step by step)

- Distributor's permission is required to use this product. When these manuals are used, please consult with our distributor.

- 1. The manual is PDF format included in the GT Works3/DVGT Works/DVGT Designer products.

- For details of PLC to be connected, refer to the PLC's user manual respectively.
GT11 Handy GOT General Description

**1. Features**
- High-resolution monitoring and connectivity to FC devices.
- High-speed display and communication of 115.2Kbps.
- Shape and color of indicator buttons, and location of buttons are designed to optimize the use of the GOT.
- High-speed display and high-speed touch switch interface.
- IEC61131-2, IEC61508, IEC61784-2, and IEC61784-5 specifications are supported.
- A drawing software for PC GT Designer2 (for GOT) or GT Designer3 (for GOT Lite) can be used.
- The USB port is compatible with the standard.
- The USB connector is tolerated as standard.
- An external maintenance function is included as standard.
- The maintenance effect function is supported.
- The program is supported by the use of the maintenance function.
- The GOT is supported by the use of the maintenance function.
- The GOT can be used with the maintenance function.
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- The GOT can be used with the maintenance function.
### 4.2 Periodic Inspection

#### 4.2.1 Daily Inspection

<table>
<thead>
<tr>
<th>No.</th>
<th>Inspection Item</th>
<th>Inspection Method</th>
<th>Collection</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power supply voltage check</td>
<td>20.4 to 26.4VDC</td>
<td>1</td>
<td>0% at the operating ambient temperature of 25°C</td>
</tr>
<tr>
<td>2</td>
<td>Power supply voltage check</td>
<td>20.4 to 26.4VDC</td>
<td>1</td>
<td>0% at the operating ambient temperature of 25°C</td>
</tr>
<tr>
<td>3</td>
<td>Wiring inspection</td>
<td>Coaxial cable</td>
<td>Visual check</td>
<td>Not loose</td>
</tr>
<tr>
<td>4</td>
<td>Connections</td>
<td>Coaxial cable</td>
<td>Visual check</td>
<td>Not loose</td>
</tr>
<tr>
<td>5</td>
<td>Battery</td>
<td>26.4VDC</td>
<td>Visual check</td>
<td>Not loose</td>
</tr>
</tbody>
</table>

**Note:**
- Please check the following on the label of the product sheet before replacing the product.

**3.3 Performance Specifications**

- **Input requirements**
- **Output requirements**
- **Power consumption**
- **Input/output specifications**
- **Built-in function**
- **Power supply**
- **Environmental specifications**
- **Battery specification**
- **Accessories**

**3.4 External Dimensions**

- **Dimensions of the GOT main unit**
- **Dimensions of the optional replacement battery**
- **Dimensions of the GOT module**

**4. Maintenance and Inspection**

The GOT should be inspected to ensure proper operation before using it for special purposes such as nuclear power, electric power, and other similar industries. Mitsubishi Electric Corporation recommends that you consult with qualified personnel before using the GOT for any purpose related to human life.

**5. Cautions on Using Emergency Stop Switch**

**Note:**
- The instructions in this section are for use by qualified personnel who have read and understood the user's manual. Unauthorized persons should not attempt to use the emergency stop switch.

**For safety use**

- This product has been designed and manufactured under strict quality control. However, when using the product, it is recommended to inspect the technical specification and the performance of the product before use.
3.3 Performance Specifications

<table>
<thead>
<tr>
<th>Inspection Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Battery</strong></td>
<td></td>
</tr>
<tr>
<td>Capacity</td>
<td>Lithium battery</td>
</tr>
<tr>
<td>Voltage</td>
<td>5.7V</td>
</tr>
<tr>
<td>Current</td>
<td>10mA/24VDC</td>
</tr>
<tr>
<td>Life</td>
<td>Approx. 100,000h.</td>
</tr>
</tbody>
</table>

4.3 Battery Replacement

The battery is not replaceable by the user. For replacement, contact an authorized service center.

- **Battery replacement procedure**
  1. **Remove the battery**
  2. **Connect to the battery**
  3. **Insert the new battery**
  4. **Authenticate the new battery**

5. Cautions on Using Emergency Stop Switch

- **Emergency stop switch**
- **Emergency power**
- **Emergency mode**

6. Specifications

- **Environmental specifications**
  - Temperature: -25°C to +70°C
  - Humidity: 5% to 95%

- **Electrical specifications**
  - Input voltage: 24VDC
  - Current consumption: 10mA

- **Mechanical specifications**
  - Dimensions: 204 (8.04") x 159 (6.26") x 20 mm

- **Software specifications**
  - OS: Windows CE 5.0

7. Compliance

- **CE marking**
- **Safety**
- **CE marking**
- **Safety**

8. For use with Mitsubishi Electric products

- **Emergency stop switch**
- **Emergency power**
- **Emergency mode**

9. Before use

- Inspect the product for damage or defects before use.
- Ensure all components are installed correctly.

10. For details on CE marking, refer to the following:

    GT11 Handy GOT User's Manual
GT11 Handy GOT General Description

**Specifications**

The company name and the product name to be described in this manual are the registered trademarks or registered design marks of the company. For the detailed information, please refer to the User's Manual.

**SAFETY PRECAUTIONS**

Several factors other of the GOT may stop the power supply. Some of them are followed:

1. **Always check the power supply prior to power failure.**
2. **Ensure that the power supply is turned off before attempting to connect or disconnect the device.**
3. **Before connecting or disconnecting the device, ensure that the power supply is turned on.**
4. **Before performing any maintenance on the device, ensure that the power supply is turned off.**

**Operating Environment**

- **Storage ambient temperature**
  - Storage: -20°C to 60°C
  - Operation: 0°C to 50°C
- **Storage ambient humidity**
  - Non-condensing
- **Vibration**
  - Operating: 0.2g (frequency range: 5-9Hz)
  - Storage: 0.5g (frequency range: 5-9Hz)
- **Shock**
  - Operating: 35g (duration: 11ms)
  - Storage: 70g (duration: 1ms)

**Display**

- **Color**
  - 256-color display
- **Brightness**
  - Adjustable (max. brightness: 200)
- **Initialization**
  - Automatic initialization (at power on)
- **Backlight**
  - Consuming power: 1.4W

**Connections**

- **Connectors**
  - RS-232C (9-pin, D-sub)
  - RS-422/485 (9-pin, D-sub)
  - USB (Type A, 4-pin)

**Power Supply**

- **Power supply**
  - 9VDC (large-size battery)

**Dimensions**

- **Width**
  - 150mm
- **Depth**
  - 125mm
- **Height**
  - 58mm

**Weight**

- **Weight**
  - 1.5kg

**Bundled Items**

- **GT11 Handy GOT User Manual**
- **GT11 Handy GOT Software CD-ROM**

**Associated Manuals**

- **GT Designer3 Installation Manual**
- **GT Designer3 User's Manual**
- **GT Designer3 System Design Manual**
- **GT Designer3 Library Manual**

**Related Manuals**

- **GT Designer3 Installation Manual**
- **GT Designer3 User's Manual**
- **GT Designer3 System Design Manual**
- **GT Designer3 Library Manual**

**2.2 Bac Panel**

- **Environmental protection back cover opened**
- **Environmental protection back cover closed**
3.3 Performance Specifications

<table>
<thead>
<tr>
<th>Function</th>
<th>GT1150HS-QLBD</th>
<th>GT1155HS-QSBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display size</td>
<td>265 (6.62&quot;)</td>
<td>337 (8.46&quot;)</td>
</tr>
<tr>
<td>Temperature</td>
<td>-20 to 50°C</td>
<td>-20 to 50°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>≤90% RH</td>
<td>≤90% RH</td>
</tr>
<tr>
<td>Power supply voltages</td>
<td>100 - 240V</td>
<td>100 - 240V</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>115/230V</td>
<td>115/230V</td>
</tr>
<tr>
<td>Communication interface</td>
<td>RS-422/RS-232</td>
<td>(2-position switch)</td>
</tr>
<tr>
<td>USB interface</td>
<td>Full Speed 12Mbps</td>
<td>1ch</td>
</tr>
<tr>
<td>Key number</td>
<td>6 switches</td>
<td>6 switches</td>
</tr>
<tr>
<td>Key type</td>
<td>N/O contact</td>
<td>N/O contact</td>
</tr>
<tr>
<td>Key contact resistance</td>
<td>10mA/24VDC</td>
<td>10mA/24VDC</td>
</tr>
<tr>
<td>Key life</td>
<td>1,000,000 times</td>
<td>1,000,000 times</td>
</tr>
<tr>
<td>Connector shape</td>
<td>Round 32 pins</td>
<td>Round 32 pins</td>
</tr>
<tr>
<td>Transmission speed</td>
<td>115,200/57,600/38,400/19,200/9,600/4,800bps</td>
<td>115,200/57,600/38,400/19,200/9,600/4,800bps</td>
</tr>
<tr>
<td>Application</td>
<td>PLC communication (Select either RS-422 or RS-232 when used)</td>
<td>PLC communication (Select either RS-422 or RS-232 when used)</td>
</tr>
<tr>
<td>Battery replacement procedure</td>
<td>2) Loosen the environmental protection back cover screws at four points on GOT. (Manufacture's serial number 1010001)</td>
<td>2) Loosen the environmental protection back cover screws at four points on GOT. (Manufacture's serial number 1010001)</td>
</tr>
<tr>
<td>Battery life</td>
<td>5 years</td>
<td>5 years</td>
</tr>
<tr>
<td>LCD life</td>
<td>50,000 hours</td>
<td>50,000 hours</td>
</tr>
<tr>
<td>Backlight life</td>
<td>75,000 hours</td>
<td>50,000 hours</td>
</tr>
</tbody>
</table>

4. Periodic Inspection

4.1 Daily Inspection

Daily inspection shall be performed when equipment has been used or even to the unit inspection.

4.2 Periodic Inspection

Yearly or half-yearly inspection

4.3 Replacement

The battery breaks up stock chart, battery life and drop out of stock if the battery is used.

Battery replacement procedure

1) Open the battery cover on the back panel.
2) Loosen the environmental protection back cover screws at four points on GOT.
3) Replace the battery.
4) Tighten the cover.

Please note that these dots appear due to its characteristic and are not caused by product defect.

4.4 Other than Mitsubishi products.

Warranty

Exclusion of loss in opportunity and secondary loss from warranty liability

5. Cautions on Using Emergency Stop Switch

The following conditions shall apply when the system is used in conjunction with the emergency stop switch.

Notification of CE marking

Note: This symbol mark is for China only.

For safe use