

MITSUBISHI ELECTRIC

GOT2000 Series Supplementary Description

(Compliance with the ATEX Directive)

GT2712-STWD GT2710-VTWD GT2510-VTWD
GT2508-VTWD

Thank you for choosing Mitsubishi Electric Graphic Operation Terminal (GOT).

Prior to use, please read both this manual and the detailed manual thoroughly to fully understand the product.

MODEL	GOT2000-U-ATEX-EK
Model code	1D7MQ3
IB(NA)-0800551ENG-H(2307)MEE	

© 2016 MITSUBISHI ELECTRIC CORPORATION

SAFETY PRECAUTIONS
(Always read these precautions before using this equipment.)

The GOT that complies with the ATEX Directive 2014/34/EU of the EU Directives and the Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres Regulations 2016 of the UK regulations is in compliance with IECEx Scheme IEC 60079-0/-15/-31 standards has the Ex marking on its rating plate. To use the ATEX-compliant GOT in explosive atmospheres, thoroughly read this manual, the GOT2000 Series User's Manual (Hardware), and other relevant manuals introduced therein. Make sure to pay full attention to safety and handle the product correctly.

The precautions given in this manual are concerned with the ATEX-compliant GOT to be used specifically in explosive atmospheres. In this manual, the safety precautions are ranked as "WARNING".

WARNING Indicates that incorrect handling may cause hazardous conditions, resulting in death or serious injury.

Always follow the instructions because they are important to personal safety. Please save this manual to make it accessible when required and always forward it to the end user.

[INSTALLATION PRECAUTIONS]

WARNING

When conducting work (such as installing, operating, or maintaining the product) in an explosive atmosphere, conform to the following standards, laws, and regulations. Not doing so results in death or serious injury.

- Standard EN, IEC 60079-14: Explosive atmospheres - Part 14: Electrical installations design, selection and erection
- Standard EN, IEC 60079-17: Explosive atmospheres - Part 17: Inspection and maintenance of electrical installations in hazardous areas
- Regional laws and regulations, etc.

When conducting work in an explosive atmosphere, must use the GOT with special fittings and the protective sheet sold separately.

Use both the fittings included with the GOT and separately sold special fittings (*1) to install the GOT to the control panel.

*1 When purchasing special fittings, consult your local Mitsubishi Electric representative or branch office.

GOT	Special fittings to use
GT2712-STWD	GT25-12FIT-EXS ²
GT2710-VTWD	GT25-10FIT-EXS ²
GT2510-VTWD	
GT2508-VTWD	-

WARNING

*2 The following shows the special fitting models and the product configurations.

Model	Description	Quantity
GT25-12FIT-EXS	Special fitting A (BD808D084)	3
	Special fitting B (BD808D191)	1
GT25-10FIT-EXS	Special fitting A (BD808D084)	2

For GT2712-STWD (8 fittings)

For GT2710-VTWD, GT2510-VTWD (6 fittings)

For GT2508-VTWD (4 fittings)

Sold separately Protective sheet(*3) is attached on the GOT surface.

*3 For the Protective sheet sold separately, contact your local sales office.

GOT	Protective sheet name
GT2712-STWD	GT25-12PSCC-UC
GT2710-VTWD	GT25-10PSCC-UC
GT2510-VTWD	
GT2508-VTWD	GT25-08PSCC-UC

WARNING

If the protective sheet without the hole for the USB environmental protection cover is attached, position the sheet from the upper left of the GOT.

To attach the protective sheet, attach it from one direction gradually. Make sure to fit the protective sheet onto the joining surface closely without leaving any air between them. Attach the protective sheet with adding additional pressure sufficiently to the adhesive side of the outer circumference. To hold adequate strength of the adhesive joining, use the GOT after a lapse of about 24 hours.

If any of the fittings is out of place, the GOT installed to the control panel does not comply with the ATEX Directive. (The GOT cannot be used in explosive atmospheres.)

[PRECAUTIONS FOR INSTALLATION, REMOVAL, OPERATION, AND MAINTENANCE]

WARNING

The ATEX/IECEx-compliant GOT is usable in Zone 2 or Zone 22 explosive atmospheres.

- Low mechanical impact: This equipment is to be installed in an area of low mechanical impact.
- Electrostatic charging: Wipe the front panel with a damp cloth before turning on the equipment.
- Extension and auxiliary extension interfaces: Extension and auxiliary extension interfaces cannot be used in explosive atmospheres.
- Before mounting or demounting, replacing, or wiring the GOT, make sure that there is no explosive gas or dust around the product.
- The ambient temperature of the protective enclosure must not be over 55°C.
- Make sure that each interface, the terminal block, an SD card, and the battery cover are secured firmly into place.
- The USB cable must be clamped appropriately at the USB interface (Host/Device). (Figure 1 is an example of clamping a cable at the USB interface (Host).)

Figure 1

- The Graphic Operation Terminal (GOT) must be installed in an IP65 enclosure.

WARNING

- The protective enclosure cannot be opened while the system is energized.
- Maintenance of the unit must be done when the units' power is turned off and there is no explosive atmosphere present.
- Make sure to turn off the GOT, and then conduct work (such as wiring or installing the GOT and inserting or removing an SD card).
- Make sure that the FG terminal of the power supply is grounded.
- Make sure that the GOT is screwed firmly into place.
- Do not use any damaged equipment.

Manual

The following shows manuals relevant to this product.

Manual name	Manual number (Model code)
GOT2000 Series User's Manual (Hardware) (Sold separately)	SH-081194ENG (1D7MJ5)

For the latest e-Manuals and PDF manuals, consult your local sales office.

Before using the GOT

Connect the GOT to the battery.

Refer to the GOT2000 Series User's Manual (Hardware) for the connection instructions.

For details on the GOT specifications, installing instructions, wiring, maintenance and inspection, or checking procedure for the version and the compatible standard, refer to the GOT2000 Series User's Manual (Hardware).

1. CONFORMING STANDARDS

The GOT with the Ex marking on its rating plate complies with the following standards.

- Standard EN, IEC 60079-0: Explosive atmospheres - Part 0: Equipment - General requirements
- Standard EN, IEC 60079-15: Explosive atmospheres - Part 15: Equipment protection by type of protection "m"
- Standard EN, IEC 60079-31: Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

2. Ex MARKING

The ATEX-compliant GOT has the Ex marking on its rating plate as shown below.



The following shows the meaning of the Ex marking.

(1) II 3G Ex nA IIC T5 Gc
II: Product group (non-mining)
3G: Product category (Zone 2, gases/vapors)
Ex: Explosion proof (Explosion protected)
nA: Type of protection (Non-sparking equipment)
IIC: Gas atmosphere (Typical gas: hydrogen)
T5: Temperature class (Highest surface temperature: 100°C)
Gc: Equipment protection level (Not an ignition source during normal operation in gas areas)

(2) II 3D Ex tc IIC T100°C Dc
II: Product group (non-mining)
3D: Product category (Zone 22, dusts)
Ex: Explosion proof (Explosion protected)
tc: Type of protection (Dust ignition protection by enclosure)
IIC: Dust atmosphere (Conductive dust)
T100°C: Highest surface temperature 100°C
Dc: Equipment protection level (Not an ignition source during normal operation in dust areas)

(3) Tamb 0°C to +55°C
Operating ambient temperature ranging from 0°C to 55°C

(4) IECEx TUR 15.0030 X
Certificate number

3. INSTALLING AND REMOVING THE GOT

3.1 Installing the GOT

To install the 12.1" or 10.4" GOT on the control panel, use both the fittings included with the GOT and the special fittings sold separately. The 8.4" GOT does not require the special fittings.

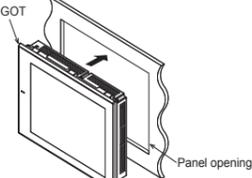
Model	Product	Quantity	Applicable screen size	Applicable GOT
GT25-12FIT-EXS	Special fitting A (BD808D084)	3	12.1"	GT2712-STWD
	Special fitting B (BD808D191)	1		
GT25-10FIT-EXS	Special fitting A (BD808D084)	2	10.4"	GT2710-VTWD GT2510-VTWD

For the panel cutting dimensions, refer to the GOT2000 Series User's Manual (Hardware).

The following shows an example of the horizontal installation. For the vertical installation, make sure that the vertical installation arrow printed on the GOT rear face points upward.

Install the GOT in the following procedure.

Step1. Insert the GOT into the panel opening.



Step2. Align the fittings with the installation holes on the GOT, and install the fittings.

Fasten the fittings in the following order.

- For GT2712-STWD
Standard fittings → special fitting A → special fitting B
- For GT2710-VTWD or GT2510-VTWD
Standard fittings → special fitting A

Use a Phillips-head screwdriver No. 2 to tighten the mounting screws within the specified torque range as shown below.

- For standard fittings: 0.36 N.m to 0.48 N.m
- For special fittings A and B: 0.42 N.m to 0.48 N.m

Overtightening may cause the GOT front panel to deform, making wrinkles on the protective sheet.

■GT2712-STWD (8 fittings)

■GT2710-VTWD or GT2510-VTWD (6 fittings)

3.2 Removing the GOT

Remove the GOT in the reverse of the installation procedure.

4. INSTALLING AND REMOVING THE BATTERY

Install a battery to the GOT before the first startup. GT27 and GT25 come with a battery in the battery holder. Before using GT27 and GT25, connect the battery connector to the GOT connector.

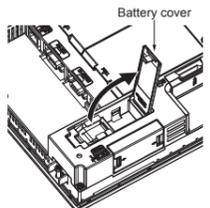
To replace the battery, leave the GOT on for more than 10 minutes before replacing the battery. Replace the battery within 5 minutes. For details on the batteries, refer to Battery Specifications in the GOT2000 Series User's Manual (Hardware).

The following shows the procedure for installing and removing a battery. (Described with the GOT rear face facing up.)

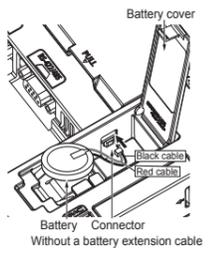
4.1 Installing the Battery

4.1.1 Installing the battery to GT2712-STWD, GT2710-VTWD or GT2510-VTWD

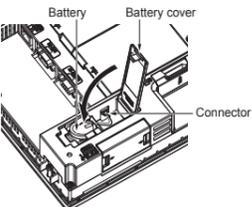
Step1. Make sure that the GOT power is off.
Step2. Install the battery to the GOT rear face.
Open the battery cover as shown below.



Step3. Insert the battery connector to the GOT connector.



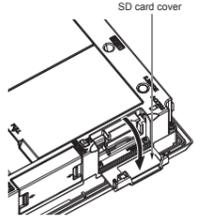
Step4. After installing the battery to the battery holder of the GOT, close the battery cover until it clicks.



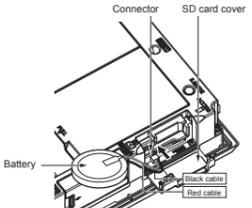
Step5. Turn on the GOT.
Step6. Check that the battery condition is normal with the utility.

4.1.2 Installing the battery to GT2508-VTWD

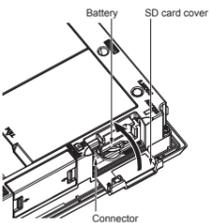
Step1. Make sure that the GOT power is off.
Step2. Install the battery inside the SD card cover on the side of the GOT. Open the SD card cover as shown in the following figure.



Step3. Insert the battery connector to the GOT connector.



Step4. After installing the battery to the battery holder of the GOT, close the SD card cover until it clicks.



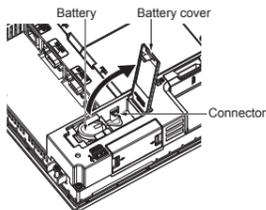
Step5. Turn on the GOT.
Step6. Check that the battery condition is normal with the utility. For the details of the battery condition display, refer to the following.

4.2 Removing the Battery

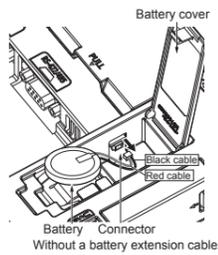
4.2.1 Removing the battery to GT2712-STWD, GT2710-VTWD or GT2510-VTWD

Step1. Make sure that the GOT power is off.

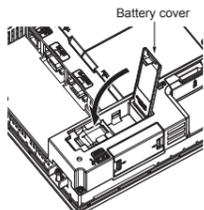
Step2. The battery is stored in the GOT rear face. Open the battery cover as shown below.



Step3. Unplug the battery connector from the GOT connector.



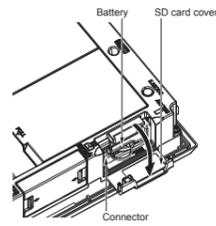
Step4. Push and close the battery cover until it clicks.



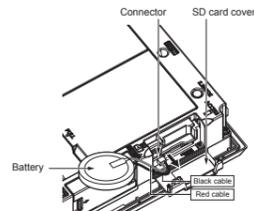
4.2.2 Removing the battery to GT2508-VTWD

Step1. Make sure that the GOT power is off.

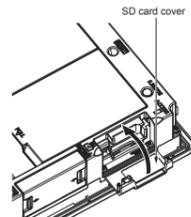
Step2. The battery is stored inside the SD card cover on the side of the GOT. Open the SD card cover as shown in the following figure.



Step3. After removing the battery from the battery holder of the GOT, unplug the battery connector from the GOT connector.



Step4. Close the SD card cover until it clicks.



5. EU DECLARATION OF CONFORMITY

MITSUBISHI ELECTRIC
Changes for the Better

EU DECLARATION OF CONFORMITY

We, Manufacturer : MITSUBISHI ELECTRIC CORPORATION
Address (Place of Declare) : TOKYO 100-8310, JAPAN
Brand Name : **MITSUBISHI ELECTRIC**

declare under our sole responsibility that the product
Description : Graphic Operation Terminal
Type of Model : GOT2000 Series
Notice : Each type name shows from next page

to which this declaration relates is in conformity with the following standard and directive.

Directive	2014/53/EU	EN 61311-2-2:2007
EMC Directive	2014/53/EU	EN 61311-2-2:2007
ATEX Directive	2014/54/EU	EN IEC 60079-0: 2018 EN 60079-15: 2010 EN 60079-31: 2014
RoHS Directive	2011/65/EU (EU)2015/863	EN IEC 63000:2018

to ATEX directive.
Marking of units: II 3 G D
Additional marking: Ex nA IIC T5 Gc
Ex to IIC T100°C Dc
Temp. 0°C to +55°C

Marking of units: II 3 G D
Additional marking: Ex nA IIC T5 Gc
Ex to IIC T100°C Dc
Temp. 0°C to +55°C

Authorized representative in Europe
(The person authorized to compile the Technical file or relevant Technical documentation)
Harold Füll
FA Product Marketing Director, MITSUBISHI ELECTRIC EUROPE B.V., German Branch
Mitsubishi-Electro-Platz 1, 40882 Ratingen, Germany
Issue Date (Date of Declaration): 17 Jun. 2021

Signed for and on behalf of
(Signature) *Atsuko Onishi*
(Signature) *Atsuko Onishi*
General Manager, HMI System Dept.
MITSUBISHI ELECTRIC CORPORATION

Page 1 of 2 BCN-P9999-1887-F

6. UK DECLARATION OF CONFORMITY

MITSUBISHI ELECTRIC
Changes for the Better

UK DECLARATION OF CONFORMITY

We, Manufacturer : MITSUBISHI ELECTRIC CORPORATION
Address (Place of Declare) : TOKYO 100-8310, JAPAN
Brand Name : **MITSUBISHI ELECTRIC**

declare under our sole responsibility that the product
Description : Graphic Operation Terminal
Type of Model : GOT2000 Series
Notice : Refer to next page about each type name

to which this declaration relates is in conformity with the following standard and legislation.

Legislation	Harmonized Standard	Approved Body
Electromagnetic Compatibility Regulations 2016	EN 61311-2:2007	---
The Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres Regulations 2016	EN IEC 60079-0: 2018 EN 60079-15: 2010 EN 60079-31: 2014	---
The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012	EN IEC 63000:2018	---

to The Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres Regulations.
Marking of units: II 3 G D
Additional marking: Ex nA IIC T5 Gc
Ex to IIC T100°C Dc
Temp. 0°C to +55°C

Issue Date (Date of Declaration): 30 Jun. 2021

Signed for and on behalf of
(Signature) *Atsuko Onishi*
(Signature) *Atsuko Onishi*
General Manager, HMI System Dept.
MITSUBISHI ELECTRIC CORPORATION NAGOYA WORKS

Page 1 of 2 BCN-P9999-2803-F

Warranty

Mitsubishi Electric will not be held liable for damage caused by factors found not to be the cause of Mitsubishi Electric; machine damage or lost profits caused by faults in the Mitsubishi Electric products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi Electric; damages to products other than Mitsubishi Electric products; and to other duties.

⚠ For safe use

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric.
- This product has been manufactured under strict quality control. However, when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

Sales office/Tel

- Americas**
- Mitsubishi Electric Automation, Inc.
500 Corporate Woods Parkway, Vernon Hills, IL 60061, U.S.A.
Tel: +1-847-478-2100
- Mitsubishi Electric do Brasil Comercio e Servicos Ltda.
Avenida Adelfino Cardana, 293, 21 andar, Bethaville, Barueri SP, Brazil
Tel: +55-11-4689-3000
- Mitsubishi Electric Automation, Inc. Mexico Branch
Boulevard Miguel de Cervantes Saavedra 301, Torre Norte Piso 5, Ampliación Granada, Miguel Hidalgo, Ciudad de Mexico, Mexico, C.P.11520
Tel: +52-55-3067-7512
- Europe**
- Mitsubishi Electric Europe B.V. German Branch
Mitsubishi-Electro-Platz 1, 40882 Ratingen, Germany
Tel: +49-2102-486-0
- Mitsubishi Electric Europe B.V. UK Branch
Travellers Lane, UK-Hatfield, Hertfordshire, AL10 8XB, U.K.
Tel: +44-1707-28-8780
- Mitsubishi Electric Europe B.V. Italian Branch
Centro Direzionale Colleoni - Palazzo Sino, Viale Colleoni 7, 20864 Agrate Brianza (MB), Italy
Tel: +39-039-60531
- Mitsubishi Electric Europe B.V. Spanish Branch
Carretera de Rubí, 76-80-Appdo. 420, E-08190 Sant Cugat del Valles (Barcelona), Spain
Tel: +34-935-65-3131
- Mitsubishi Electric Europe B.V. French Branch
25, Boulevard des Bouvets, 92741 Nanterre Cedex, France
Tel: +33-1-55-68-55-68
- Mitsubishi Electric Europe B.V. Czech Branch
Pekarska 52117, 155 00 Praha 5, Czech Republic
Tel: +420-255 719 200
- Mitsubishi Electric Turkey A.S. Umranliye Branch
Serfai Mahallesi Nuh Sokak No:5, TR-34775 Umranliye / Istanbul, Turkey
Tel: +90-216-526-3990
- Mitsubishi Electric Europe B.V. Polish Branch
ul. Krakowska 48, 32-083 Balice, Poland
Tel: +48-12-347-65-00
- Africa**
- Adroit Technologies
20 Waterford Office Park, 189 Witkoppen Road, Fourways, South Africa
Tel: +27-11-658-8100
- Asia-Pacific**
- Mitsubishi Electric Automation (China) Ltd.
Mitsubishi Electric Automation Center, No.1386 Hongqiao Road, Shanghai, China
Tel: +86-21-2322-3030
- SETSUYO ENTERPRISE CO., LTD.
6F, No.105, Wugong 3rd Road, Wugu District, New Taipei City 24889, Taiwan
Tel: +886-2-2259-2499
- Mitsubishi Electric Automation Korea Co., Ltd.
7F to 9F, Gangseo Hangang X-tower A, 401, Yangcheon-ro, Gangseo-Gu, Seoul 07528, Korea
Tel: +82-2-3960-9569
- Mitsubishi Electric Asia Pte. Ltd.
307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943
Tel: +65-6473-2308
- Mitsubishi Electric Factory Automation (Thailand) Co., Ltd.
12th Floor, SV City Building, Office Tower 1, No. 999/19 and 20 Rama 3 Road, Kwaeng Bangpongpan, Khet Yannawa, Bangkok 10120, Thailand
Tel: +66-2882-6522 to 31
- PT. Mitsubishi Electric Indonesia
Gedung Jaya 8th Floor, Jl. MH. Thamrin No.12, Jakarta Pusat 10340, Indonesia
Tel: +62-21 3192-6461
- Mitsubishi Electric Vietnam Company Limited
11th & 12th Floor, Viettel Tower B, 285 Cach Mang Thang 8 Street, Ward 12, District 10, Ho Chi Minh City, Vietnam.
Tel: +84-28-3910-5945
- Mitsubishi Electric India Pvt. Ltd. Pune Branch
Emerald House, EL-3, J Block, M.I.D.C., Bhosari, Pune - 411026, Maharashtra, India
Tel: +91-20-2710-2000
- MITSUBISHI ELECTRIC AUSTRALIA PTY. LTD.
348 Victoria Road, P.O. Box 11, Rydalmere, N.S.W 2116, Australia
Tel: +61-2-9684-7777

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN
NAGOYA WORKS: 1-14, YADAMINAMI 5-CHOME, HIGASHI-KU, NAGOYA 461-8670, JAPAN

When exported from Japan, this manual does not require application to the Ministry of Economy, Trade and Industry for service transaction permission.

Specifications subject to change without notice.
Printed in Japan, July 2023.