

MITSUBISHI ELECTRIC

GOT2000 Series Field Network Adapter Unit

User's Manual

GT25-FNADP

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

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

MODEL	GT25-FNADP-U-JE
MODEL CODE	1D7M02
	IB(NA)-0800549-E(2307)MEE

© 2015 MITSUBISHI ELECTRIC CORPORATION

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

Before using this product, please read this manual and the relevant manuals introduced in this manual carefully and pay full attention to safety to handle the product correctly. The precautions given in this manual are concerned with this product. In this manual, the safety precautions are ranked as "WARNING" and "CAUTION".

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

CAUTION Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.

Note that the CAUTION level may lead to a serious accident according to the circumstances. Always follow the precautions of both levels 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.

DESIGN PRECAUTIONS

WARNING

- If a communication fails in data link, the faulty station holds the data link data generated before the communication error. Create an interlock circuit in the sequence program using the communication status information in order that the system will operate safely. Failure to do so may cause mis-outputs or malfunctions, resulting in accidents. Check the faulty station and the operation status during communication error by referring to the relevant manuals.
- Some failures of cable or communication unit may cause the GOT to keep the outputs on or off. Create an external circuit for monitoring output signals that may lead to serious accidents. Failure to do so may cause mis-outputs or malfunctions, resulting in accidents.

DESIGN PRECAUTIONS

WARNING

- If a communication error (including cable disconnection) occurs during monitoring, the communication between the GOT and programmable controller CPU may be interrupted and the GOT may be inoperative. For bus connection: The programmable controller CPU is down and the GOT is inoperative. For other than above: The GOT is inoperative. When configuring a system including the GOT, the possibility of GOT communication error must be considered; make sure the operation significant for the system will be performed by switches on devices other than the GOT. Failure to do so may cause mis-outputs or malfunctions, resulting in accidents.

CAUTION

- Do not bunch the control wires or communication cables with the main circuit or power wires, or lay them close to each other. As a guide, separate the lines by a distance of at least 100mm (3.94 inches) otherwise malfunctions may occur due to noise.

INSTALLATION PRECAUTIONS

WARNING

- Be sure to shut off all phases of the external power supply used by the system before mounting or removing this unit to/from the GOT. Not doing so can cause a unit failure or malfunction.
- Before connecting the Bus connection cable to this unit, always shut off GOT power and PLC CPU power externally in all phases. Not doing so can cause a malfunction.

CAUTION

- Use this unit in the environment that satisfies the general specifications described in the User's Manual for the GOT used. Not doing so can cause an electric shock, fire, malfunction or product damage or deterioration.
- Do not drop the unit or subject it to string shock. A unit damage may result.
- When mounting this unit on the GOT, fit it to the connection interface of the GOT, and tighten the mounting screws in the specified torque range (0.36N·m to 0.48N·m) with a Phillips-head screwdriver No. 2. Undertightening can cause a drop, failure or malfunction. Overtightening can cause a drop, failure or malfunction due to screw or unit damage.
- No extension unit can be mounted on the field network adapter unit on top of them. To mount multiple extension units, mount the field network adapter unit on top of the GOT.
- Remove the communication module after removing the field network adapter unit from the GOT.
- When installing a communication module, do not directly touch the circuit board of the field network adapter unit.
- Do not remove hexalobular socket screws from the communication module. Removing the screws unfixes the front face panel of the communication module, and the communication module cannot be smoothly pulled out from the field network adapter unit.
- Push the communication module straight into the unit, aligning it with the guides. Not doing so may cause the pins in the field network adapter unit to bend.

WIRING PRECAUTIONS

WARNING

- Be sure to shut off all phases of the external power supply used by the system before wiring. Failure to do so may result in an electric shock, product damage or malfunctions.

CAUTION

- Exercise care to avoid foreign matter such as chips and wire offcuts entering the unit. Not doing so can cause a fire, failure or malfunction.
- Make sure to securely connect the cable to the connector of unit. Incorrect connection may cause malfunctions.

STARTUP AND MAINTENANCE PRECAUTIONS

WARNING

- Before starting cleaning, always shut off GOT power externally in all phases. Not doing so can cause a unit failure or malfunction. Overtightening can cause the GOT to drop, short circuit or malfunction. Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.
- Do not disassemble or modify the unit and the CF card. Doing so can cause a failure, malfunction, injury or fire.

4. INSTALLATION AND REMOVAL PROCEDURE

Point

Precautions for installation and removal of the communication module

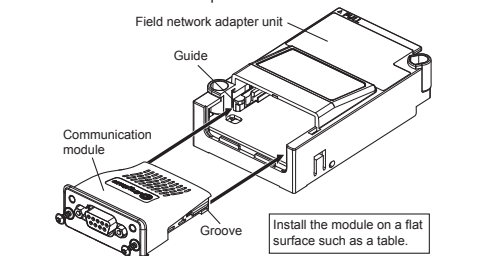
- No extension unit can be mounted on the field network adapter unit. To mount multiple extension units, mount the field network adapter unit on top of them.
- Install a communication module before mounting the field network adapter unit on the GOT. Remove the communication module after removing the field network adapter unit from the GOT.
- When installing a communication module, do not directly touch the circuit board of the field network adapter unit.
- Do not remove hexalobular socket screws from the communication module. Removing the screws unfixes the front face panel of the communication module, and the communication module cannot be smoothly pulled out from the field network adapter unit.
- Push the communication module straight into the unit, aligning it with the guides. Not doing so may cause the pins in the field network adapter unit to bend.

4.1 Installation

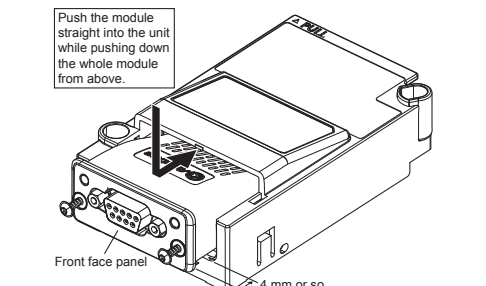
4.1.1 Installing the communication module to the field network adapter unit

The installation procedure for the communication module is explained using the communication module ABCC-M40-DPV1.

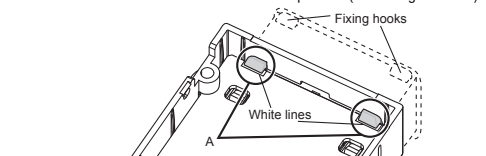
- Place the field network adapter unit on a flat surface such as a table. Align the grooves on the sides of the communication module with the guide on the circuit board of the field network adapter unit, and insert the communication module into the field network adapter unit.



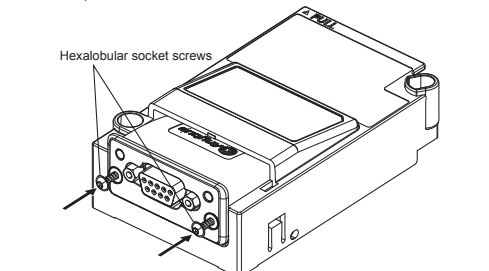
- Push the communication module straight in the insertion direction into the field network adapter unit while pushing the whole communication module down from above. The communication module reaches the connector for communication modules at the position where the distance between the front face panel of the communication module and the field network adapter unit is approximately 4 mm. When installing the communication module, be careful not to damage the connector for communication modules.



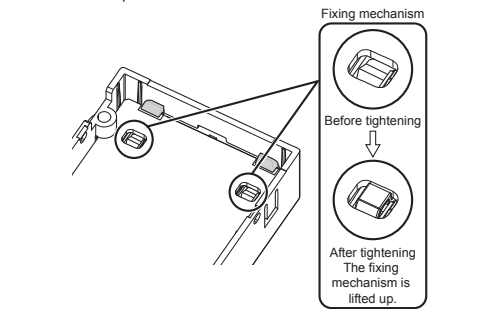
Turn the field network adapter unit upside down to check the fixing hooks. Check that the fixing hooks on the communication module are within the white lines of the circuit board of the field network adapter unit (A in the figure below).



- Tighten two hexalobular socket screws (T8) for fixing the communication module with a torque of 0.25 N·m



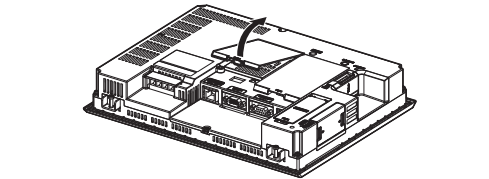
Turn the field network adapter unit upside down to check the fixing mechanism. Tightening the hexalobular socket screws pushes up the fixing mechanism of the communication module and fixes the communication module to the board of the field network adapter unit.



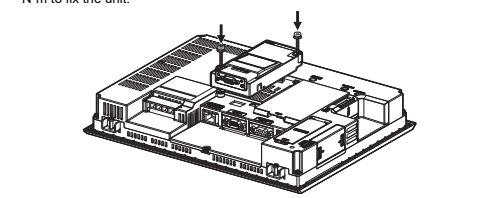
4.1.2 Mounting the field network adapter unit on the GOT

The mounting procedure for the field network adapter unit is explained using the GT2712.

- Turn off the GOT.
- Pull up the one hook in the extension unit cover (One cover on the left in the figure below) of the GOT to remove the cover toward the opposite side of the hook of the cover as a fulcrum.



- Connect the field network adapter unit to the extension interface on the GOT. Then, tighten 2 mounting screws (M3 x 12) with a torque of 0.36 N·m to 0.48 N·m to fix the unit.



CAUTION

- Do not touch the conductive areas and electronic parts of this unit directly. Doing so can cause a unit malfunction or failure.
- Always secure the cables connected to the unit, e.g. run them in conduits or clamp them. Not doing so can cause unit or cable damage due to dangling, moved or accidentally pulled cables or can cause a malfunction due to a cable contact fault.
- Do not hold the cable part when unplugging any cable connected to the unit. Doing so can cause unit or cable damage or a malfunction due to a cable contact fault.
- Always make sure to touch the grounded metal to discharge the electricity charged in the body, etc., before touching the unit. Failure to do so may cause a failure or malfunctions of the unit.

DISPOSAL PRECAUTIONS

CAUTION

- Dispose of this product as industrial waste.

TRANSPORTATION PRECAUTIONS

CAUTION

- Make sure to transport the GOT main unit and/or relevant unit(s) in the manner they will not be exposed to the impact exceeding the impact resistance described in the general specifications of the User's Manual for the GOT used, as they are precision devices. Failure to do so may cause the unit to fail. Check if the unit operates correctly after transportation.
- When fumigants that contain halogen materials such as fluorine, chlorine, bromine, and iodine are used for disinfecting and protecting wooden packaging from insects, they cause malfunction when entering our products. Please take necessary precautions to ensure that remaining materials from fumigant do not enter our products, or treat packaging with methods other than fumigation (heat method). Additionally, disinfect and protect wood from insects before packing products.

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)
GOT2000 Series Connection Manual (Microcomputers, MODBUS/Fieldbus Products, Peripherals) For GT Works3 Version1	SH-081200ENG

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

Compliance with the EMC and Low Voltage Directives

To configure a system meeting the requirements of the EMC and Low Voltage Directives when incorporating the Mitsubishi GOT (EMC and Low Voltage Directives compliant) into other machinery or equipment, refer to "EMC AND LOW VOLTAGE DIRECTIVES" of the General Description included with the GOT used. The CE mark, indicating compliance with the EMC and Low Voltage Directives, is printed on the rating plate of the GOT.

Compliance with the new China RoHS directive

GOT 相关的基于“电器电子产品有害物质限制使用管理办法”要求的表示方法

15 Note: This symbol mark is for China only.

含有有害6物质的名称、含有量、含有部件
本产品所含有的有害6物质的名称、含有量、含有部件如下表所示。
产品中含有有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
电路板组件	×	○	○	○	○	○
树脂壳体、电缆、线材	○	○	○	○	○	○
钣金部件、螺钉等金属部件	○	○	○	○	○	○

本表格依据 SJ/T11364 的规定编制。
○：表示该有害物质在该部件所有均质材料中的含量均在 GB/T26572 规定的限量要求以下。
×：表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T26572 规定的限量要求。

4.2 Removal

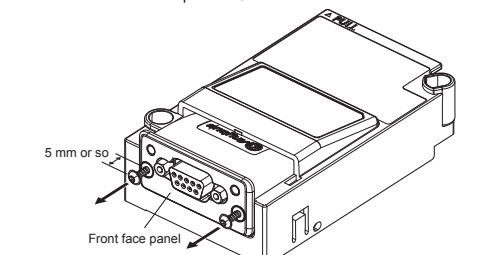
4.2.1 Removing the field network adapter unit from the GOT

Remove the field network adapter unit in the reverse procedure to the mounting.

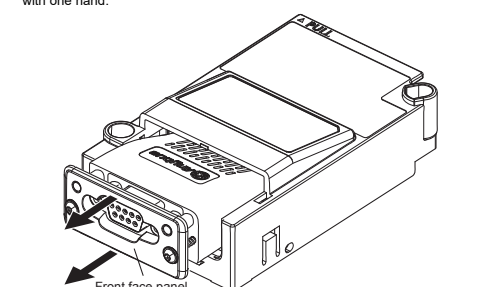
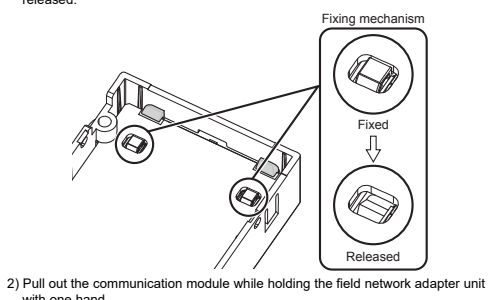
4.2.2 Removing the communication module from the field network adapter unit

Remove the communication module in the reverse procedure to the installation.

- Loosen the two hexalobular socket screws (T8) for fixing the communication module from the front face panel for 5 mm or so.



Turn the field network adapter unit upside down to check the fixing mechanism. Loosen the two hexalobular socket screws until the fixing mechanism is released.



Referenced Standard: GB/T15969.2 (Requirement of Chinese standardized law)

Packing List

After unpacking the box, check that the following products are included.

Model	Product	Quantity
GT25-FNADP	Field network adapter unit	1
	Screw set (Two P-type pan head screws with SWPW, M3x12)	1
	GOT2000 Series Field Network Adapter Unit User's Manual (This manual)	1

1. OVERVIEW

This user's manual describes the GT25-FNADP field network adapter unit (hereinafter referred to as the field network adapter unit). The field network adapter unit can be used with the following field networks by using the Anybus CompactCom M40 network communication module manufactured by HMS (hereinafter referred to as the communication module).

Communication module product name	Communication module article number ¹	Supported network
ABCC-M40-DPV1	AB6910-B, AB6910-C	PROFIBUS DP
ABCC-M40-DEV	AB6909-B, AB6909-C	DeviceNet

¹: When purchasing a communication module, specify an article number and tell HMS or the distributor from which you purchase the module.

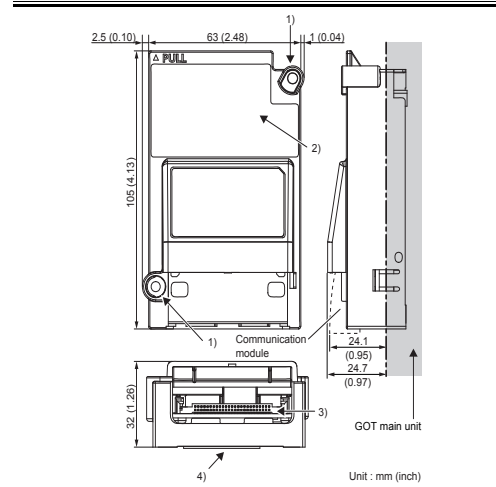
Prepare communication modules and cables by users.

2. SPECIFICATIONS

The following shows the performance specifications of the field network adapter unit. The general specifications of the field network adapter unit are the same as those of the GOT. For the general specifications of the GOT, refer to the GOT2000 Series User's Manual (Hardware).

Item	Specifications	
Internal current consumption	5.0 VDC	0.40 A
Weight		0.07 kg

3. PART NAMES AND EXTERNAL DIMENSIONS



No.	Name	Description
1)	Mounting screw	Screw for fixing the GOT
2)	Rating plate	-
3)	Connector for the communication module	Connector for connecting a communication module
4)	Extension connector	Extension connector connected to the GOT

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 Adelino 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, Ampliacion Granada, Miguel Hidalgo, Ciudad de Mexico, Mexico, C.P.11520
Tel: +52-55-3067-7512

Europe

Mitsubishi Electric Europe B.V. German Branch
Mitsubishi-Electric-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 Colonna - Palazzo Siro, Viale Colonna 7, 20864 Agrate Brianza (MB), Italy
Tel: +39-039-60531

Mitsubishi Electric Europe B.V. Spanish Branch
Carretera de Rubi, 75-80-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: +33-1-55-88-55-68

Mitsubishi Electric Europe B.V. Czech Branch
Pataarska 621/7, 155 00 Praha 5, Czech Republic
Tel: +420-255 719 200

Mitsubishi Electric Turkey A.S. Umraniye Branch
Serfilah Mahallesi Nutuk Sokak No:5, TR-34775 Umraniye / Istanbul, Turkey
Tel: +90-216-526-9900

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.
8F, No.105, Wugong 3rd Road, Wugu District, New Taipei City 24889, Taiwan
Tel: +886-2-2299-2499

Mitsubishi Electric Automation Korea Co., Ltd.
7F to 9F, Gangseo Hangang Xi-tower A, 401, Yangcheon-ro, Gangseo-Gu, Seoul 07528, Korea
Tel: +82-2-3650-9690

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. 896/19 and 20 Rama 3 Road, Kwaeng Bangpang, Khet Yannawa, Bangkok 10120, Thailand
Tel: +66-2682-6522 to 31

PT. Mitsubishi Electric Indonesia
Gedung Jaya 8th Floor, JI. 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, YADA-MINAMI 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.

MELSEC, MELSOFT, and GOT, are trademarks or registered trademarks of Mitsubishi Electric Corporation in Japan and other countries.
Anybus is a registered trademark of HMS Industrial Networks AB.
DeviceNet is a trademark of ODVA (Open DeviceNet Vendor Association, Inc.).
Other company and product names herein are trademarks or registered trademarks of their respective owners.