

MITSUBISHI ELECTRIC

GOT2000 Series Wireless LAN Communication Unit User's Manual

GT25-WLAN

Thank you for purchasing the GOT2000 Series.

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

MODEL	GT25-WLAN-U-JE
MODEL CODE	1D7MM2
IB(NA)-0800522-D(1604)MEE	

GOT2000

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.

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.

INSTALLATION PRECAUTIONS

CAUTION

- Use this unit in the environment that satisfies the general specifications described in the GOT2000 Series User's Manual (Hardware). 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 installing this unit to the GOT, fit it to the side interface of GOT and tighten the mounting screws in the specified torque range (0.10 N·m to 0.14 N·m) with a Phillips-head screwdriver No. 1. When the GOT is installed vertically, its side interface is positioned on the bottom.

To prevent the falling of the wireless LAN communication unit from the side interface, install or remove the unit while holding it with hands. Undertightening can cause a drop, failure or malfunction. Overtightening can cause a drop, failure or malfunction due to screw or unit damage.

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. Undertightening 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 any unit. This will cause failure, malfunction, injuries, or fire.
- Do not touch the conductive areas and electronic parts of this unit directly. Doing so can cause a unit malfunction or failure.

CAUTION

- 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.

PRECAUTIONS FOR REMOTE CONTROL

WARNING

- Remote control is available through a network by using GOT functions, including the SoftGOT-GOT link function, the remote personal computer operation function, the VNC server function, and the GOT Mobile function. If these functions are used to perform remote control of control equipment, the field operator may not notice the remote control, possibly leading to an accident.

In addition, a communication delay or interruption may occur depending on the network environment, and remote control of control equipment cannot be performed normally in some cases. Before using the above functions to perform remote control, fully grasp the circumstances of the field site and ensure safety.

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.

Before Using the Product

Precautions for Use

Do not modify this wireless LAN communication unit in any way. Doing so is prohibited by the Japan Radio Law. Data transfer in wireless LAN communication may not be as stable as that in cable communication. A packet loss may occur depending on the surrounding environment and the installation location. Be sure to perform a confirmation of operation before using this product.

Precautions for radio-frequency interference

- This product operates in the 2.4 GHz band, which is used for industrial, scientific and medical applications (such as microwave ovens), customer-premises radio stations for identifying mobile units (licensed), specific low-power radio stations (license-free), and amateur radio stations (licensed).
- Before using this product, make sure that customer-premises radio stations for identifying mobile units, specific low-power radio stations, and amateur radio stations are not operational near the product.
- In the event that this product causes harmful radio-frequency interference with a customer-premises radio station for identifying mobile units, immediately stop the emission of radio waves and take countermeasures to prevent interference, such as changing the frequency and location of the product.
- Contact your local sales office if you have any problems caused by this product, such as harmful radio-frequency interference with the radio stations mentioned above.

Security Precautions

Wireless LAN uses radio waves instead of LAN cables to send and receive data between a computer and a wireless LAN access point, making it possible to freely establish a LAN connection within a range of the radio waves. However, radio waves can be received through obstacles, such as walls, when within the range. Therefore, if security settings are not made, the following problems may occur.

- Unauthorized viewing of data
- Unauthorized access

An unauthorized third party can intercept the radio waves and sneak a look at user ID and password. An unauthorized third party can access network and cause the following damage:

- Intercepting personal information and confidential information (information leak)
- Using a false identity to communicate and disclose information illegally (identity theft)
- Changing and transmitting intercepted data (tampering)
- Damaging data and systems by spreading a computer virus (destruction)

The wireless LAN communication unit and wireless LAN access point have security features to counter these problems. Configuring the security settings before using the wireless LAN equipment can help to prevent these problems from occurring. The security settings of the wireless LAN equipment are not configured at the time of purchase. To reduce security problems, configure all security settings of the wireless LAN equipment according to the manual before using the wireless LAN communication unit and wireless LAN access point. Please be aware that the security settings do not provide complete security protection due to wireless LAN specifications. If you are unable to configure the security settings yourself, please contact your local authorized dealer. The customer is responsible for configuring the security settings and understanding the risks inherent in using the product without the security settings configured.

Manuals

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 User's Manual (Utility) (Sold separately)	SH-081195ENG (1D7MJ6)
GOT2000 Series Connection Manual (Microcomputers, MODBUS/Fieldbus Products, Peripherals) For GT Works3 Version1	SH-081200ENG

For detailed manuals, refer to the PDF manuals stored in the DVD-ROM for the drawing software used.

Relevant Manuals

For relevant manuals, refer to the PDF manuals stored in the DVD-ROM for the screen design software used.

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Packing List

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

Model	Product	Quantity
GT25-WLAN	Wireless LAN communication unit	1
	GOT2000 シリーズ無線 LAN 通信ユニット取扱説明書 / GOT2000 Series Wireless LAN Communication Unit User's Manual (This manual)	1
	GOT2000 系列無線LAN通信ユニット使用説明書 / GOT2000 시리즈 무선 LAN 통신 장치 사용자 매뉴얼	1

FCC Part 15 Notice

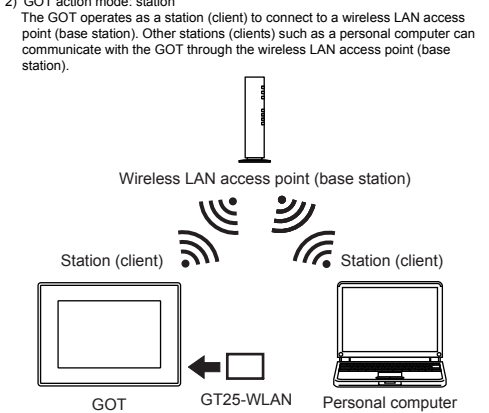
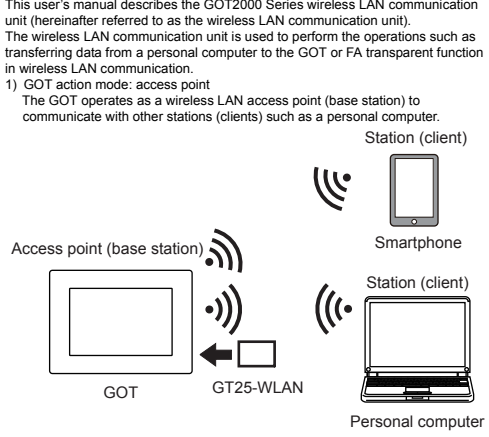
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION

Change or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate to the equipment.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

1. OVERVIEW



For the usable GOTs, refer to the following.

- GOT2000 Series User's Manual (Hardware)

For the setting and system configuration of wireless LAN function, refer to the following.

- GT Designer3 (GOT2000) Screen Design Manual
- GOT2000 Series User's Manual (Utility)
- GOT2000 Series Connection Manual (Microcomputers, MODBUS/Fieldbus Products, Peripherals) For GT Works3 Version1

2. SPECIFICATIONS

The following shows the performance specifications of the wireless LAN communication unit.

The general specifications of the wireless LAN communication unit are the same as those of the GOT.

For the general specifications of the GOT, refer to the following.

- GOT2000 Series User's Manual (Hardware)

Use compatible versions of the screen design software and BootOS.

Screen design software:

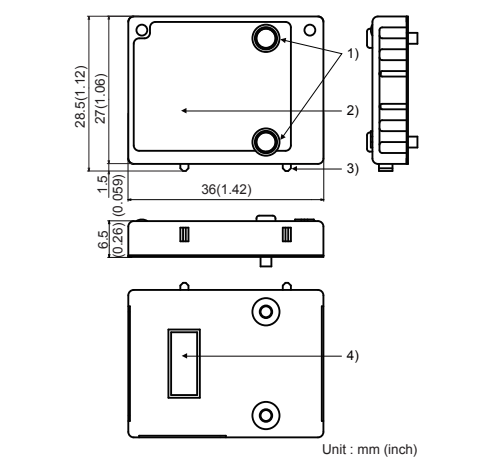
- GT Works3 Version1.105K or later (for use as a station (client))
- GT Works3 Version1.144A or later (for use as an access point (base station) or a station (client))

BootOS: Version C or later

Item	Specifications
Standard*1	IEEE802.11b/g/n compatible
Channel	11ch (1 to 11ch)
Data rates*2	IEEE802.11b: up to 11Mbps IEEE802.11g: up to 54Mbps IEEE802.11n: up to 72.2Mbps
Wireless connection mode	Infrastructure mode
Security*3	64bit/128bit WEP WPA-PSK(TKIP, AES) WPA2-PSK(TKIP, AES)
Number of antennae	1 (Built-in chip antenna)
Action mode	Access point (base station), station (client)*4
Maximum number of connectable stations (GOT action mode: access point)	5
Internal current consumption	0.4A
Weight	0.01kg
Compliance with	Japan Radio Law*5, FCC*6, R&TTE*6, SRRC*7, KC*7

*1 IEEE802.11n only supports 2.4-GHz-bandwidth.
*2 The values of data rates (11Mbps and others), used in this document and the setting screen, are the theoretical maximum of the wireless LAN standard. These values do not indicate the effective data rates.
*3 When security authentication is performed by WEP or TKIP method, the wireless LAN communication unit cannot communicate by IEEE802.11n. To communicate by IEEE 802.11n, perform the security authentication by WPA-PSK(AES) or WPA2-PSK(AES) method.
*4 A wireless LAN access point (commercial product) compatible with IEEE802.11b/g/n standards is required separately.
*5 The product with hardware version A or later (manufactured in December 2013) complies with the regulation. The product with hardware version A can be used only in Japan.
*6 The product with hardware version B or later (manufactured from October 2014) complies with the regulation. The product with hardware version B or later can be used in Japan, the United States, the EU member states, Switzerland, Norway, Iceland, and Liechtenstein.
*7 The product with hardware version D or later (manufactured from May 2016) complies with the regulation. The product with hardware version D or later can be used in Japan, the United States, the EU member states, Switzerland, Norway, Iceland, Liechtenstein, China (excluding Hong Kong, Macao, and Taiwan), and South Korea.

3. PART NAMES AND EXTERNAL DIMENSIONS



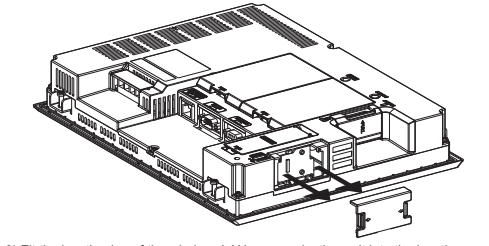
No.	Name	Description
1)	Mounting screw	Screw for fixing the GOT
2)	Rating plate	-
3)	Locating lug	Locating lug fit into the locating groove of the GOT
4)	Extension connector	Extension connector connected to the side interface of the GOT

4. INSTALLATION AND REMOVAL PROCEDURE

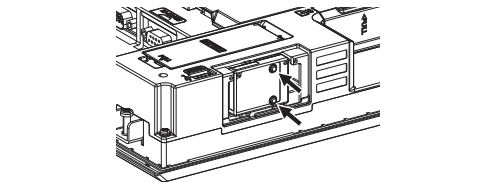
4.1 Unit Installation

The installation procedure for the wireless LAN communication unit is explained using the GT2712.

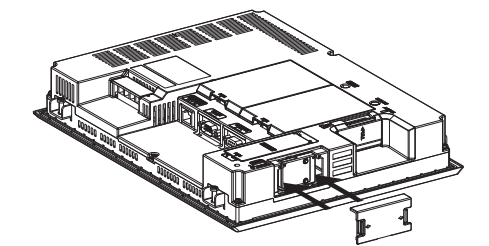
- Turn off the GOT.
- Remove the side interface cover of the GOT.



- Fit the locating lug of the wireless LAN communication unit into the locating groove of the GOT, and install the wireless LAN communication unit to the extension connector.
- Tighten the mounting screws (2 places) of the wireless LAN communication unit with a No.1 Phillips screwdriver and a torque of 0.10N·m to 0.14N·m to fix the unit.



- Install the side interface cover to the GOT.



4.2 Unit Removal

For removing the wireless LAN communication unit, reverse the procedure of the installation.

5. R&TTE Directive

Compliance with the R&TTE Directive, which is one of the EU directives, has been mandatory for the products sold within EU member states since 1999. To prove the compliance with the R&TTE Directive, manufacturers must issue an EC Declaration of Conformity and the products must bear a CE marking. This product is compliant with EN300 328/EN301 489-1/-17/EN60950-1/EN62311.

• CE marking

Declaration of Conformity

MITSUBISHI ELECTRIC
Changes for the Better

DECLARATION OF CONFORMITY
For

Product: Wireless LAN Communication Unit
Model: GT25-WLAN

Supplied by: MITSUBISHI ELECTRIC Corporation, Nagoya Works, 1-14 Yada-Minami 5-Chome Higashi-Ku, Nagoya 461-8670 Japan

Technical Construction File held by: MITSUBISHI ELECTRIC Corporation, Nagoya Works, 1-14 Yada-Minami 5-Chome Higashi-Ku, Nagoya 461-8670 Japan

Notified Body - R&TTE Directive: N/A

Standard used for conformity: EN 60950-1:2006 + Amd.11:2009 + Amd.1:2010 + Amd.12:2011, EN 62311:2008

R&TTE Directive (Article 3.1(b) EMC): EN 301 489-1 V1.9.2:2011, EN 301 489-17 V2.2.1:2012

R&TTE Directive (Article 3.2 Spectrum): EN 300 328 V1.8.1:2012

Means of Conformity: We declare under our sole responsibility that the Product (s) is conformity with the essential requirements and other relevant requirements of the Radio and Telecommunication Terminal Equipment (R&TTE) Directive (1999/5/EC).

Date of issue: July 25, 2014

Signature of Responsible Person: Tetsuya Kuroi, Manager, HIM System Dept.

6. PRECAUTIONS

To use the wireless LAN communication unit, installing the system application and setting the controller are required.

For the settings and system configuration, refer to the following.

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

Warranty

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

Country/Region	Sales office/Tel
USA	Mitsubishi Electric Automation, Inc. 500 Corporate Woods Parkway, Vernon Hills, IL 60061, U.S.A. Tel: +1-847-478-2100
Brazil	Mitsubishi Electric do Brasil Comercio e Servicos Ltda. Rua Jussara, 1750- Bloco B Anexo, Jardim Santa Cecilia, CEP 06465-070, Barueri - SP, Brazil Tel: +55-11-4689-3000
Mexico	Mitsubishi Electric Automation, Inc. Mexico Branch Mariano Escobedo #69, Col. Zona Industrial, Tlalnepantla Edo. Mexico, C.P.54030 Tel: +52-55-3067-7511
Germany	Mitsubishi Electric Europe B.V. German Branch Mitsubishi Electric-Platz 1, 40882 Ratingen, Germany Tel: +49-2102-486-0
UK	Mitsubishi Electric Europe B.V. UK Branch Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, U.K. Tel: +44-1707-28-8780
Italy	Mitsubishi Electric Europe B.V. Italian Branch Centro Direzionale Collei - Palazzo Siro, Viale Collei 7, 20064 Agrate Brianza (Milano), Italy Tel: +39-039-60531
Spain	Mitsubishi Electric Europe B.V. Spanish Branch Carretera de Rubi 76-80-Appdo.420, 08190 Sant Cugat del Valles (Barcelona), Spain Tel: +34-935-65-3131
France	Mitsubishi Electric Europe B.V. French Branch 25, Boulevard des Bouvets, 92741 Nanterre Cedex, France Tel: +33-1-65-68-55-68
Czech	Mitsubishi Electric Europe B.V. Czech Branch Avenir Business Park, Radlicka 751/113e, 158 00 Praha 5, Czech Republic Tel: +420-251-551-470
Turkey	Mitsubishi Electric Turkey A.S. Umraniye Branch Serfil Mahallesi Nispeti Sokak No.5, TR-34775 Umraniye / Istanbul, Turkey Tel: +90-216-526-9900
Poland	Mitsubishi Electric Europe B.V. Polish Branch ul. Krakowska 50, 32-083 Balice, Poland Tel: +48-12-347-65-00
Russia	Mitsubishi Electric (Russia) LLC St. Petersburg Branch Piskarevsky pr. 2, bld 2, lit "Sch", BC "Beru", office 720; RU-195027 St. Petersburg, Russia Tel: +7-812-633-3497
South Africa	Adroit Technologies 20 Waterford Office Park, 189 Witkoppen Road, Fourways, Johannesburg, South Africa Tel: +27-11-658-8100
China	Mitsubishi Electric Automation (China) Ltd. No.1386 Hongtao Road, Mitsubishi Electric Automation Center, Shanghai, China Tel: +86-21-5322-3030
Taiwan	SETSUYO ENTERPRISE CO., LTD. 6F, No.105, Wugong 3rd Road, Wugu District, New Taipei City 24889, Taiwan Tel: +886-2-2299-2499
Korea	Mitsubishi Electric Automation Korea Co., Ltd. 7F-9F, Gangseo Hangang Xi-tower A, 401, Yangcheon Gangseo-Gu, Seoul 07528, Korea Tel: +82-2-3660-9530
Singapore	Mitsubishi Electric Asia Pte. Ltd. 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Tel: +65-6473-2308
Thailand	Mitsubishi Electric Factory Automation (Thailand) Co., Ltd. 12th Floor, 5V City Building, Office Tower 1, No. 999/19 and 20 Rama 3 Road, Kwaeng Bangpoo, Khet Yanwaha, Bangkok 10120, Thailand Tel: +66-2682-6522 to 31
Indonesia	PT. Mitsubishi Electric Indonesia Gedung Jaya 11th Floor, J.L. MH. Thamrin No.12, Jakarta Pusat 10340, Indonesia Tel: +62-21-5192-6461
Vietnam	Mitsubishi Electric Vietnam Co., LTD. Ho Chi Minh Head Office Unit 01-04, 10th Floor, Vincom Center, 72 Le Thanh Ton Street, District 1, Ho Chi Minh City, Vietnam Tel: +84-8-3910-5945
India	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
Australia	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 BUILDING, 2-7 MARUNOUCHI, CHYODA-KU, TOKYO 100-8310, JAPAN
NAGOYA WORKS : 1-14, YADA-MINAMI 5-CHOME, HIGASHI-KU, NAGOYA, 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.
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