

# mitsubishi

## A9GT-50WRS2/A9GT-50WRS4 type Serial Communication Board

### User's Manual

Thank you for buying the MELSEC-GOT Series

Prior to use, please read both this manual and detailed manual thoroughly and familiarize yourself with the product.



MODEL	A9GT-50WRS2/RS4-U
MODEL CODE	1DM113
IB(NA)-0800186-B(0406)MEE	

MITSUBISHI Graphics Operation Terminal

# ● SAFETY PRECAUTIONS ●

(Always read before starting use)

When using Mitsubishi equipment, thoroughly read this manual and the associated manuals introduced in the manual. Also pay careful attention to safety and handle the module properly.

These precautions apply only to the installation of Mitsubishi equipment and the wiring with the external device. Refer to the user's manual of the CPU module to be used for a description of the PLC system safety precautions.


These ● SAFETY PRECAUTIONS ● classify the safety precautions into two categories: "DANGER" and "CAUTION".



Procedures which may lead to a dangerous condition and cause death or serious injury if not carried out properly.



Procedures which may lead to a dangerous condition and cause superficial to medium injury, or physical damage only, if not carried out properly.

Depending on circumstances, procedures indicated by  **CAUTION** may also be linked to serious results.

In any case, it is important to follow the directions for usage.

Store this manual in a safe place so that you can take it out and read it whenever necessary. Always forward it to the end user.

## [DESIGN PRECAUTIONS]

### **DANGER**

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

## [INSTALLATION PRECAUTIONS]

### **DANGER**

- Before mounting or dismounting this module to or from the GOT, always shut off GOT power.  
Not doing so can cause a module failure or malfunction.
- Before connecting the Communication cable to this module, always shut off GOT power.  
Not doing so can cause a malfunction.

## [INSTALLATION PRECAUTIONS]

### CAUTION

- Use this module in the environment given in the general specifications of the GOT User's Manual.  
Not doing so can cause an electric shock, fire, malfunction or product damage or deterioration.
- Insert the communication board securely into the GOT connector.  
After it has been inserted, check to make sure that it is not being lifted up.  
A faulty connection can lead to faulty input or output.
- When installing this unit to the GOT, fit it to the connection interface of the GOT and tighten the mounting screws in the specified torque range.  
Undertightening can cause a drop, failure or malfunction.  
Overtightening can cause a drop, failure or malfunction due to GOT or screw damage.
- When mounting the communication board, take care not to become injured by the components that are installed or surrounding materials.
- When mounting the communication board, remove any static electricity accumulated on your body before engaging in work.  
Otherwise, this may result in damage to the board.

## [WIRING PRECAUTIONS]

### CAUTION

- Plug the communication cable into the connector of the connected module and tighten the connector mounting screws in the specified torque range.  
Undertightening can cause a short circuit or malfunction. Overtightening can cause a short circuit or malfunction due to the damage of the screws or module.

## [STARTUP AND MAINTENANCE PRECAUTIONS]

### DANGER

- Before starting cleaning, always shut off GOT power.  
Not doing so can cause a module failure or malfunction.

## CAUTION

- Do not disassemble or modify any module.  
This will cause failure, malfunction, injuries, or fire.
- Do not touch the conductive areas and electronic parts of this module directly.  
Doing so can cause a module malfunction or failure.
- Always secure the cables connected to the module, e.g. run them in conduits or clamp them. Not doing so can cause module 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 module.  
Doing so can cause module 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 module.  
Failure to do so may cause a failure or malfunctions of the module.

## [DISPOSAL PRECAUTIONS]

## CAUTION

- When disposing of the product, handle it as industrial waste.

## Manuals

### Relevant Manuals

For relevant manuals, refer to the PDF manual stored within the drawing software.

# 1. Overview

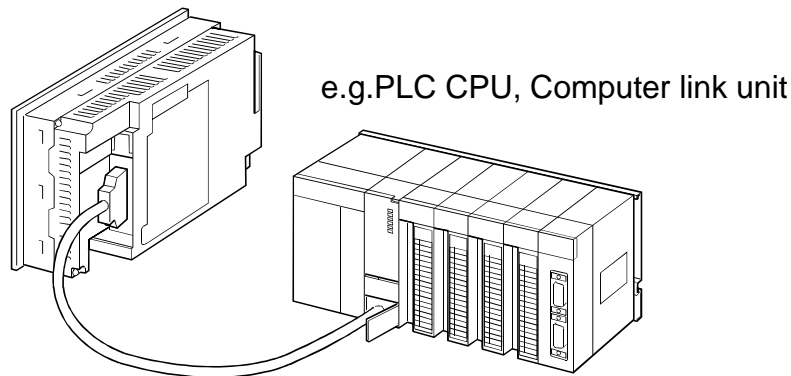
This user's manual describes the A9GT-50WRS2 serial communication board (hereafter referred to as the "A9GT-50WRS2")/A9GT-50WRS4 serial communication board (hereafter referred to as the "A9GT-50WRS4").

Fitted to the A956WGOT, the A9GT-50WRS2/A9GT-50WRS4 can be connected with the PLC CPU, computer link unit, microcomputer, other's PLC, or the like by using RS-232C/RS-422 connector for peripheral.

The A9GT-50WRS2 is a communication board used for RS-232C communication.

The A9GT-50WRS4 is a communication board used for RS-422 communication.

A956WGOT + A9GT-50WRS2/A9GT-50WRS4



For details of the system configuration, refer to the GOT-A900 Series User's Manual(GT Works Version5/GT Designer Version5 compatible Connection System Manual)

After opening the box, check that the following items are present.

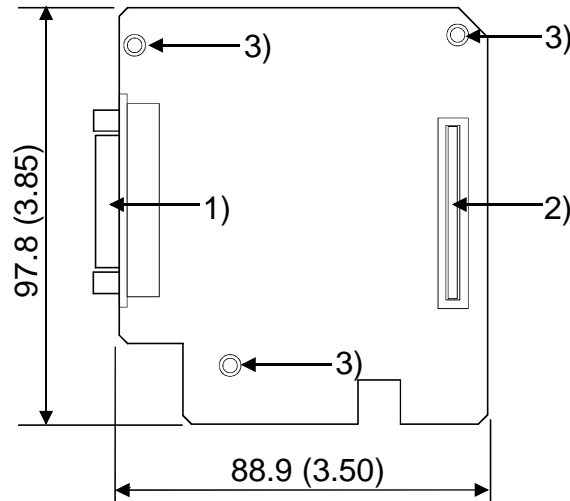
Description	Quantity
A9GT-50WRS2 or A9GT-50WRS4	1
Communication board Mounting screw	3

## 2. Specifications

### 2.1 Specifications of the A9GT-50WRS2/A9GT-50WRS4

Item	Specifications	
	A9GT-50WRS2	A9GT-50WRS4
Communication connector	9-pin D-sub(male) inch screw DDK brand (17LE-23090-27(D3CC))	25-pin D-sub(female) meter screw DDK brand (17L-10250-27(D3AC))
Internal current consumption (DC5V) [mA]	12.4	17
weight [g] (lb)	42 (0.09)	48 (0.11)

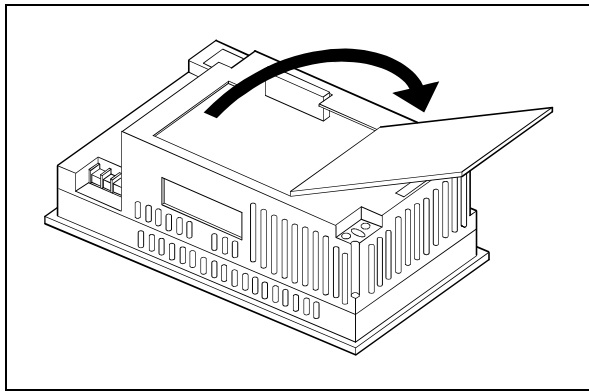
## 3. Name of the Parts and Outline Dimension Drawing



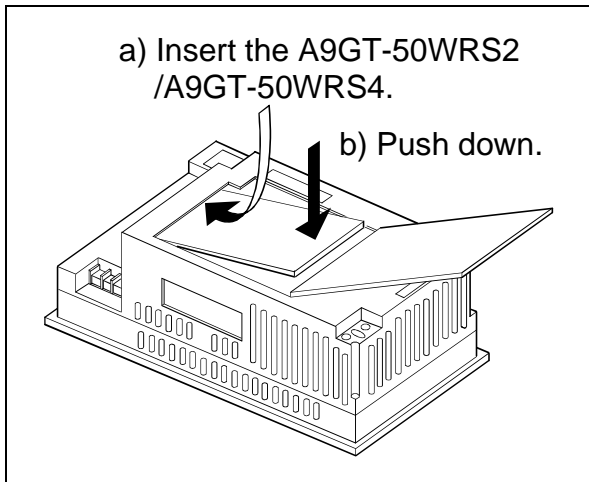
Unit:mm(inch)

Number	Name	Description
1)	Communication cable connection connector	Connector for connection of communication cable
2)	Connector	Connector for connection to the GOT
3)	Communication board mounting screw hole	Screw hole for mounting to the GOT

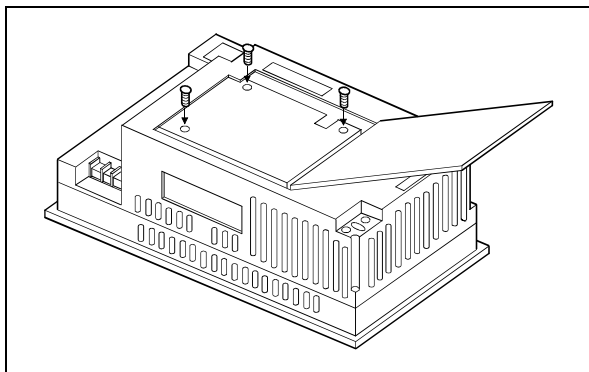
## 4. Installation Procedure



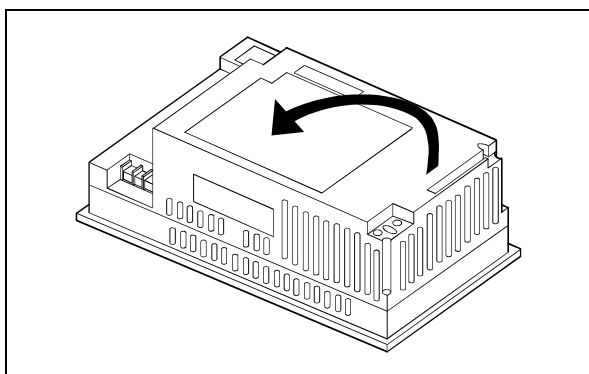
- 1) Open the slot cover on the back of the A956WGOT.



- 2) Mount the A9GT-50WRS2 or the A9GT-50WRS4 in the slot for mounting a communication board.  
(Align the hole for the attachment screw on the transmission board with the hole for the attachment screw on the transmission board of the GOT main module, then attach.)



- 3) Fix by tightening the mounting screws of the A9GT-50WRS2 or the A9GT-50WRS4 within the specified torque range (36 to 48 N • cm).



- 4) Close the slot cover.

To remove the unit, reverse the installation procedure.

Be careful not to touch the board inside the GOT main body by hand when mounting the A9GT-50WRS2 or the A9GT-50WRS4.

## 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.

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