



for a greener tomorrow



**MITSUBISHI  
ELECTRIC**

*Changes for the Better*

FACTORY AUTOMATION

# GOT2000 Series

Graphic Operation Terminal

## Expand the possibility **White & Open**



White model



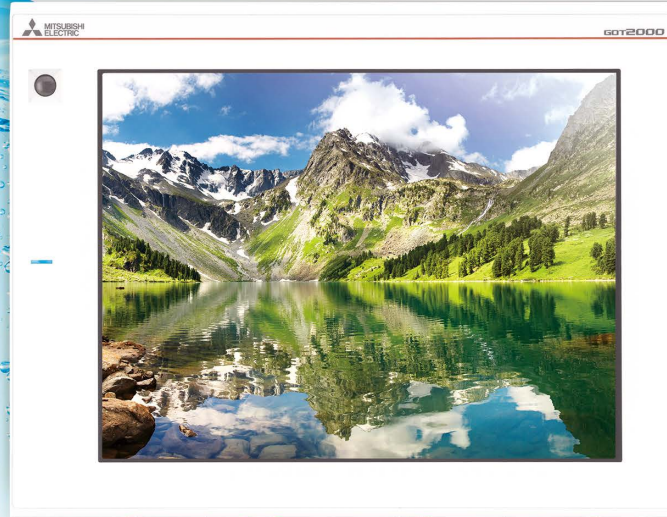
Open frame model

# **GOT2000**

Graphic Operation Terminal

- Class I Division 2, ATEX, and KCs compliant GT27/GT25 white models
- Flexibly design panel surface with GT25 open frame models

# GOT2000 Series White Model makes the production site clear and clean



## Point 1

### Flush, easy-to-clean surface

Flush surface without a USB interface on the front face prevents foreign matters from entering into the GOT. Having chamfers on the top and bottom faces, you can easily wipe clean the equipment.



## Point 2

### Best matches white-color panel

The white model portrays a clean image and highlights the white-color equipment. It is easy to find foreign matters and dirt so that you can keep the equipment clean.

## Point 3

### Environmentally-resistant, usable in various applications

GOT is acceptable for use in hazardous locations classified by various safety standards (Class I, Division 2 [the United States, Canada], ATEX [Europe], KCs [Korea])\*1. Since GOT conforms to water, dust, and oil-proof IP67F standard, it is acceptable for use in areas where water or oil are present\*2.

\*1 Approval standards vary depending on the model. For the information about the latest conformity status, please refer to the "Approval standards" (page 8).

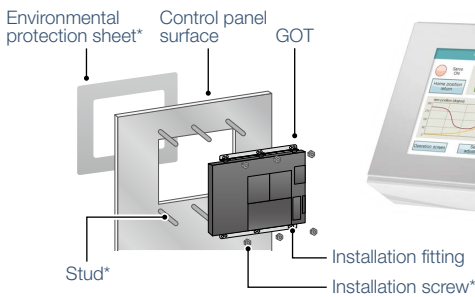
\*2 Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.



# GOT2000 Series Open Frame Model ideal for various applications



## Installation instructions



## Point 1

### Flexibly design surface

Installing the GOT2000 from the back side of the control panel complements the surface design. You can freely design the equipment without worrying about the frame color.

\* An environmental protection sheet (optional or prepared by the users), studs and screws (prepared by the users) are required separately.

## Point 2

### Just right for stainless environment

Using a stainless-look environmental protection sheet (GT25F-□□ESGS [optional]\*) allows the touch panel to blend into the production equipment.

\* For the details, please refer to the "Product list" (page 8).



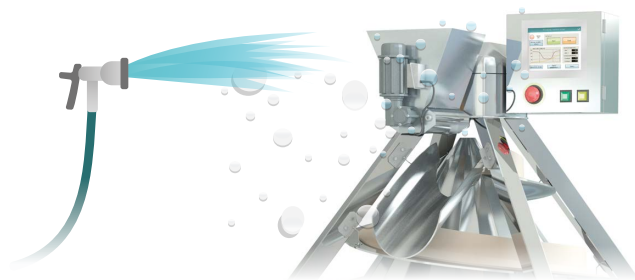
## Point 3

### Safe and clean use

Flush surface prevents foreign matters from accumulating on the edge. To conform to IP67F, attach an environmental protection sheet, and GOT can be operated with wet hands, wiped with a damp cloth, and washed with water\*.

Since the GOT frame does not appear on the operation panel surface, there is no concern about broken or damaged piece of the frame entering into the equipment.

\* Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.



# GOT can help solve safety and labor-saving problems required in food, pharmaceutical, and cosmetic industries

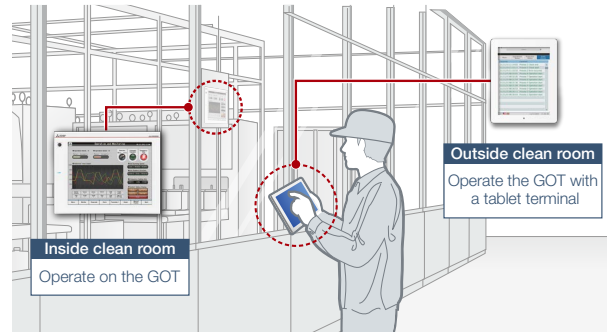
▶ **Monitor your worksite anytime, anywhere!**  
**GOT contributes to labor saving at the production site**

**GOT Mobile function\*** **GOT Mobile**

**Monitor production from outside the clean room**

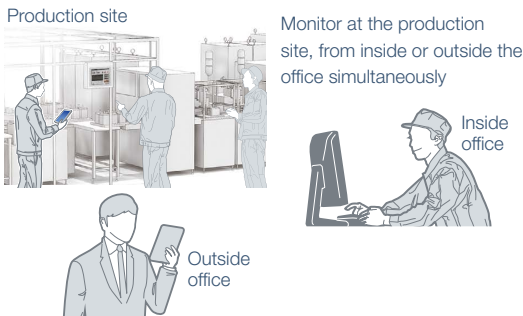
Via the GOT at the production site, check the equipment status using a web browser on tablets from outside the clean room. From remote locations, check the production in a timely manner and you can take necessary actions immediately.

\* A separate license (GT25-WEBSKEY) is required.  
 \* To use the wireless LAN connection between GOT and tablet terminals, the wireless LAN communication unit (GT25-WLAN) or an access point is required separately.  
 \* Not supported by GT23, GT21.



**Monitor production by up to five operators simultaneously**

Five information devices can access a GOT at the same time and each information device can display and operate a different screen. When setting up the equipment, up to five operators can efficiently work at the same time to check and make settings.



▶ **Simple, user-friendly changeover**

**Recipe function**

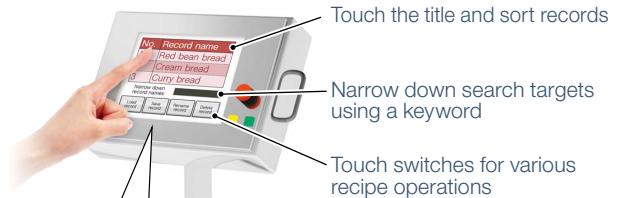
GOT saves the recipe information such as material blend and machine conditions. You can select a recipe to be written to the programmable controller, which achieves the quick changeover for the production line.

**Easy view, simple operation**

Recipe names (record names) are displayed in a list format on GOT\*. Records can be sorted by record number or record name by touching the column header, or can be narrowed down by keywords. You can easily select records on the GOT.

\* Recipe display (record list) is not supported by GT21.

**Recipe display (record list)\***



		Red beans	Cream	Curry
Record 1	Red bean bread	300	0	0
Record 2	Cream bread	0	500	0
Record 3	Curry bread	0	0	350

**Write record 1**



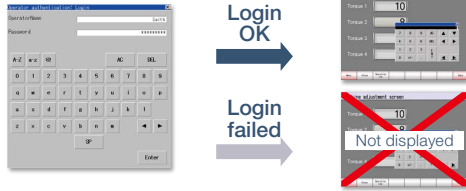
**Specification details and restrictions**

For the supported connection types and necessary option devices, please refer to the Graphic Operation Terminal GOT2000 Series Catalog (L(NA)08270ENG) or the relevant product manual.

## Enhance traceability and security to prevent unauthorized operation

### Operator authentication function

Manage login information using operator names and passwords.



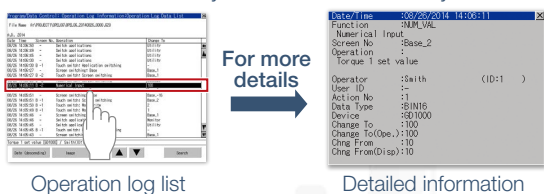
### Advantage of using together

Setting the operation authority and the viewing authority achieves “enhanced security” and “access management per operator”. Use of the operator authentication function combined with the operation log function enables you to check that “who, when, how, for what” the operation was performed. Thus, you can prevent illegal operations and identify error cause when a problem occurs.

### Operation log function\*

\* Not supported by GT21.

GOT records the operation information in chronological order in an SD memory card or USB memory.



Operation log list

Detailed information

### Supports FDA 21 CFR Part 11\*

\* Not supported by GT21.

GOT can be used to meet the requirements of FDA 21 CFR Part 11, the standards about electronic data recording of the traceability information, which is required in the food and pharmaceutical industries\*1. Various sample screens are available for helping you configure systems\*2.

\*1 The users must construct an appropriate system for the compliance with the FDA 21 CFR Part 11. For the details, please refer to the Technical Bulletin No. GOT-A-0077.

\*2 Sample screens are included with GT Works3. The sample screens are supported by GT Works3 Ver.1.152J or later.

## Prevent faulty products from appearing in the market

### Vision Systems connectivity\*1

\*1 Not supported by GT21.

Connect GOT with COGNEX products and check the inspection processing results of Vision Systems on the GOT. Simple settings can be changed on the GOT so that there is no need to use a dedicated monitor for the Vision Systems and you can save space and cost. In addition, automating the inspection processing contributes to labor saving and improves productivity.

### Vision Systems COGNEX



VisionView® VGA\*2 In-Sight® EZ\*2

Read the status of products on a high-speed processing line correctly and detect the products with wrong spelling, misprinting, or excess or shortage of materials. You can prevent faulty products from appearing in the market.

\*2 Manufactured by Cognex K.K.

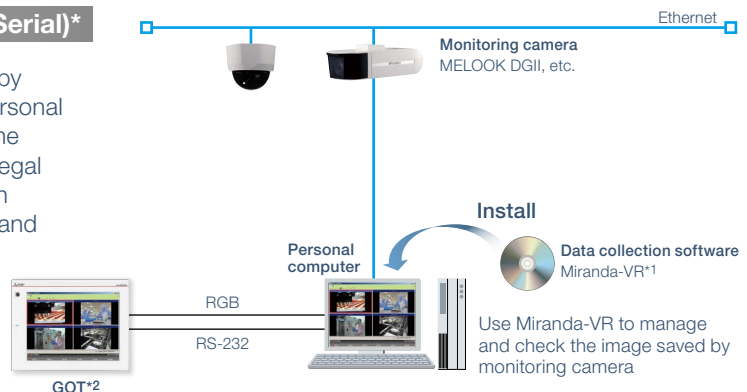
## Prevent unauthorized behavior with monitoring camera

### Remote personal computer operation (Serial)\*

Use GOT and check the video images managed by Miranda-VR, the data collection software on a personal computer. Making the on-site workers aware of the camera can function effectively in discouraging illegal behaviors. When a problem occurs, the video can help you analyze and identify the problem cause and contribute to reducing downtime.

\* Supported by GT27 (excluding GT2705).

Since GOT can be used to operate the personal computer, the video managed by Miranda-VR can be checked on the GOT.



\*1 Manufactured by Mitsubishi Electric Control Software Corporation

\*2 RGB input unit (GT27-R2 or GT27-R2-Z) is required.

### Specification details and restrictions

For the supported connection types and necessary option devices, please refer to the Graphic Operation Terminal GOT2000 Series Catalog (L(NA)08270ENG) or the relevant product manual.

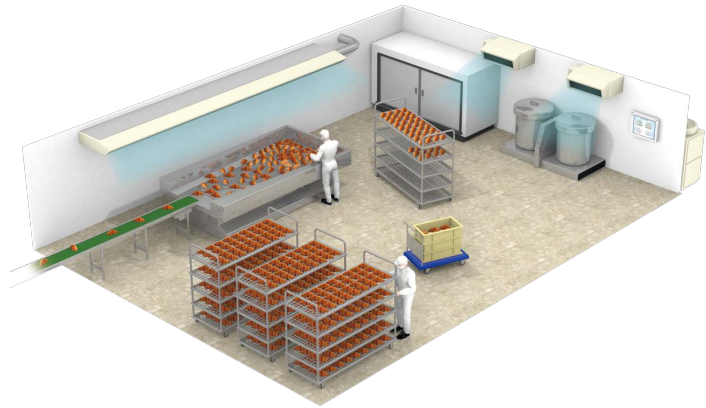
# White & Open for use in various applications

## ▶ Production site air-conditioning system

White models can be useful



On the operation panel of the production site air-conditioning system, use white models that match clean and white walls of the production site. Logging & graph/list can be used on GOT to display the energy use status. By checking the use status of the air-conditioning system, you can verify the effect of energy saving measures.



### Recommended functions

- Logging & Graph/List
- GOT Mobile function **GOT Mobile** (page 4)
- Remote personal computer operation (Serial) (page 5)

## ▶ Sterilization machine

Open frame models can be useful



For the stainless-steel sterilization machine, use open frame models that have good cleanliness. With the GOT Mobile function, you can check the sterilization status of medical equipment from a remote location using mobile terminals such as smart phone.



### Recommended functions

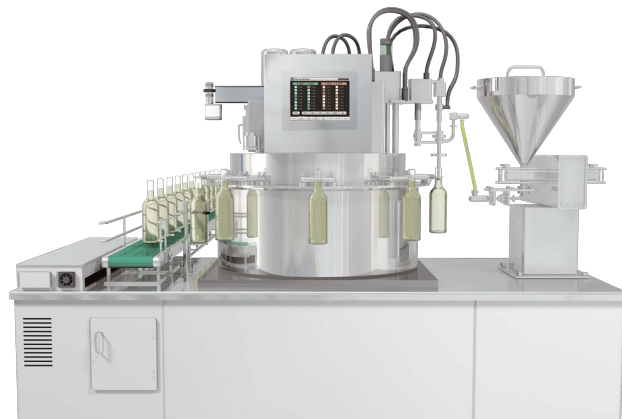
- GOT Mobile function **GOT Mobile** (page 4)
- Recipe function (page 4)
- Operator authentication/operation log function (page 5)

## ▶ Bottling machine

Open frame models can be useful



For the large-scale bottling machine, use open frame models which are easy to clean, and can prevent dust, dirt, and debris from accumulating on the edge. For various drive control devices installed on the machine, use GOT drive control interactive functions that can help you startup and adjust a servo system without using a personal computer.

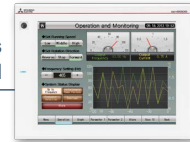


### Recommended functions

- Drive control interactive functions **GOT Drive**
- GOT Mobile function **GOT Mobile** (page 4)
- Operator authentication/operation log function (page 5)

## ▶ Packing machine

White models can be useful



For a packing machine that requires high speed drive control, use white models on which various drive control interactive functions are available. When an error occurs, the alarm function of GOT can be used to check the status of drive control devices. You can check the alarm detail without opening the cabinet and reduce downtime.



### Recommended functions

- Drive control interactive functions **GOT Drive**
- Alarm function
- Recipe function (page 4)

## GT21 models for use in compact applications

### ▶ Food processing machine (oven, quantitative filling machine, etc.)

GT21 models can be useful



For a small food processing machine, use GT21 models which are compact and fully equipped with basic functions. The compact type GOT can be installed vertically in confined spaces.



### Recommended functions

- Vertical display
- Recipe function (page 4)
- Operator authentication function (page 5)

## ▶ For product specifications and function details, please refer to the following catalogs and leaflets.

Designed to meet your industrial automation needs

**GOT2000**  
Graphic Operation Terminal



Graphic Operation Terminal  
GOT2000 Series Catalog  
L(NA)08270ENG

Monitor your worksite anytime, anywhere

**GOT Mobile**  
GOT Smart Web-based Remote Solutions



GOT Smart Web-based  
Remote Solutions Leaflet  
L(NA)08399ENG

Advanced drive control connectivity




**GOT Drive**  
GOT2000 Series Drive Control Interactive Solutions



GOT2000 Series Drive Control  
Interactive Solutions Catalog  
L(NA)08335ENG

# Approval standards

○: Supported ×: Not supported

Approval standards			White model		Open frame model	Compact model
			GT27□□-□TWA GT25□□-□TWA	GT27□□-□TWD GT25□□-□TWD	GT25□□F-□TNA GT25□□F-□TND	GT2104-RTBD
Mark	Overview	Country/Region				
CE	EMC standards, LVD standards	Europe	○	○	○	○
Ex	ATEX standards	Europe	×	○*1*2	×	×
UL	Safety standards	United States	○	○	○	○
	Class I, Division 2		○*2	○*2	×	×
cUL	Safety standards	Canada	○	○	○	○
	Class I, Division 2		○*2	○*2	×	×
KC	EMC standards	Korea	○	○	○	○
KCs	Safety standards	Korea	×	○*1*2	×	×

\*1 To conform to ATEX/KCs standard, protective sheet and special fitting in the product list are required. (Only protective sheet is required for GT2508-VTWD.) Communication units and option units cannot be used. When using these units, GOT does not conform to the standards. For the details, please refer to the Technical Bulletin "GOT2000 Series in Compliance with the ATEX Directive and KCs Certification Requirements" (No. GOT-A-0101).

\*2 GOT is acceptable for use in hazardous locations classified by the safety standards.

# Product list

Classification		Model	Screen size	Display section Display color	Panel color	Power	Remarks			
White model	GT27	GT2712-STWA	12.1" SVGA	TFT color 65536 colors	White	100 V AC to 240 V AC	Multimedia & Video/RGB compatible Multi-touch compatible			
		GT2712-STWD				24 V DC				
		GT2710-VTWA	10.4" VGA			100 V AC to 240 V AC				
		GT2710-VTWD				24 V DC				
	GT25	GT2510-VTWA	10.4" VGA			100 V AC to 240 V AC				
		GT2510-VTWD				24 V DC				
		GT2508-VTWA	8.4" VGA			100 V AC to 240 V AC				
		GT2508-VTWD				24 V DC				
	Protective sheet	GT25-12PSCC-UC*1	For 12.1"			-		-	-	· Clear type · Transparent · A set of 5 sheets
		GT25-10PSCC-UC*1	For 10.4"							
GT25-08PSCC-UC*1		For 8.4"								
Special fitting	GT25-12FIT-EXS*1	For 12.1"	-	-	-	A set of special fittings for conforming to ATEX/KCs standard				
	GT25-10FIT-EXS*1	For 10.4"								
Open frame model	GT25	GT2512F-STNA*2	12.1" SVGA	TFT color 65536 colors	No frame	100 V AC to 240 V AC	-			
		GT2512F-STND*2				24 V DC				
		GT2510F-VTNA*2	10.4" VGA			100 V AC to 240 V AC				
		GT2510F-VTND*2				24 V DC				
		GT2508F-VTNA*2	8.4" VGA			100 V AC to 240 V AC				
		GT2508F-VTND*2				24 V DC				
	Environmental protection sheet	GT25F-12ESGS	For 12.1"			-		-	-	· For conforming to IP67F · Antiglare type · Slivery · 1 sheet
		GT25F-10ESGS	For 10.4"							
Compact model	GT21	GT2104-RTBD	4.3" Wide [480 × 272 dots]	TFT color 65536 colors	Black	24 V DC	Ethernet, RS-422/485, RS-232			

\*1 To conform to ATEX/KCs standard, use GOT model that conforms to the standard with an appropriate option.

\*2 Always attach an environmental protection sheet dedicated to the open frame model (sold separately) to the display section. Or, attach a user-prepared environmental protection sheet. Not doing so may damage or soil the GOT or cause foreign matter to enter the GOT, resulting in a failure or malfunction.

The release date varies depending on the product and your region. For details, please contact your local sales office.

The actual color may differ slightly from the pictures in this catalog. The actual display may differ from what are shown on GOT screen images.

**⚠ Precautions for safe use**

To use the products given in this publication properly, always read the relevant manuals before beginning operation.

**™ Trademarks and registered trademarks**

All product and company names used herein are either trademarks or registered trademarks of their respective owners.

# MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN  
 NAGOYA WORKS: 1-14, YADA-MINAMI 5, HIGASHI-KU, NAGOYA, JAPAN

Country/Region Sales office  
 USA .....+1-847-478-2100  
 Mexico .....+52-55-3067-7511  
 Brazil .....+55-11-4689-3000  
 China .....+86-21-2322-3030  
 Taiwan .....+886-2-2299-2499  
 Korea .....+82-2-3660-9530

Singapore .....+65-6473-2308  
 Thailand .....+66-2682-6522 to 31  
 Indonesia .....+62-21-3192-6461  
 Vietnam .....+84-8-3910-5945  
 India .....+91-20-2710-2000  
 Australia .....+61-2-9684-7777

Germany .....+49-2102-486-0  
 UK .....+44-1707-28-8780  
 Italy .....+39-039-60531  
 Spain .....+34-935-65-3131  
 France .....+33-1-55-68-55-68  
 Czech .....+420-251-551-470

Turkey .....+90-216-526-3990  
 Poland .....+48-12-347-65-00  
 Russia .....+7-812-633-3497  
 South Africa .....+27-11-658-8100