

**FACTORY AUTOMATION** 

## Graphic Operation Terminal MELHMI GOT3000 Series













Our Factory Automation business is focused on "Automating the World" to make it a better, more sustainable environment supporting manufacturing and society, celebrating diversity and contributing towards an active and fulfilling role.

Mitsubishi Electric is involved in many areas including the following:

## **Energy and Electric Systems**

A wide range of power and electrical products from generators to large-scale displays.

## **Electronic Devices**

A wide portfolio of cutting-edge semiconductor devices for systems and products.

## **Home Appliance**

Dependable consumer products like air conditioners and home entertainment systems.

## **Information and Communication Systems**

Commercial and consumer-centric equipment, products and systems.

## **Industrial Automation Systems**

Maximizing productivity and efficiency with cutting-edge automation technology.



The Mitsubishi Electric Group is actively solving social issues, such as decarbonization and labor shortages, by providing production sites with energy-saving equipment and solutions that utilize automation systems, thereby helping towards a sustainable society.

## **INDEX**

Lineup	4
GOT3000 Features	7
The Smoothest and Most Beautiful GOT Ever	8
Overcoming Network Barriers	10
Engineering with Ease	14
GOT Solutions	19
Remote Solutions	20
Maintenance Solutions	24
MELSEC Interactive Solutions	26
GOT Drive Control Interactive Solutions	28
Function List	32
Specifications	34
Dimensions	36
Product List	38
Support	41

## Lineup

The Optimal HMI for Your Equipment

## **HMI**



DC



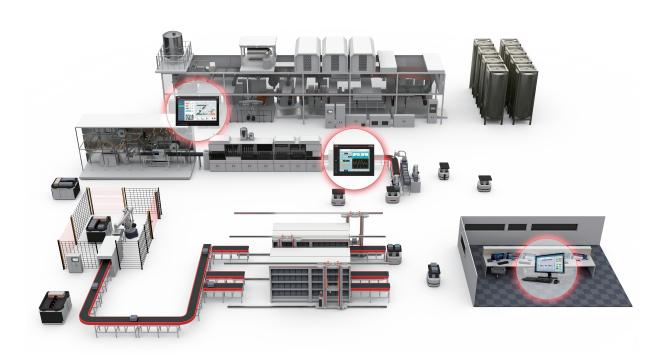


**NEW SIZE** 

15.6" Wide Full HD

GT3715-FHCBD

12.1" Wide WXGA **GT3712-WXCBD** 



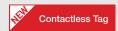














SD Memory Card

Extension Interface

RAM (User Memory) 2 GB (768 MB)

ROM (User Memory) 512 MB (256 MB)

**GT37** 

**Analog Resistive Touch Panel** 











12.1" XGA Human Sensor

**GT3712-XRBA GT3712-XRBD**  10.4" XGA

**GT3710-XRBA GT3710-XRBD**  8.4" XGA

**GT3708-XRBA GT3708-XRBD** 

Manage both GOT and production sites from your computer

## **HMI Software GT SoftGOT3000**

License required\*

Monitor equipment and production line information from your office computer.

Go to page 23 >>>



# Smooth. Seamless. Smart.





Accelerate digital transformation on your site:

Refined technology and continuous evolution

connect people, systems, and IT even more strongly.

10.0 L/min

## **INTERFACE**

## The Smoothest and Most Beautiful GOT Ever

The high-definition touch panel improves operability, achieving universal usability and visibility.

Go to the next page >>>



## **NETWORK**

## Overcoming Network Barriers

Achieve high-level security and FA data integration and collection by using GOT as an IoT gateway.

———— Go to page 10 »



## **ENGINEERING**

## **Engineering with Ease**

With new features and retained operability, the user-friendly software robustly supports screen design and the replacement of existing models.

Go to page 14 »



**GOT3000** 

## **INTERFACE**

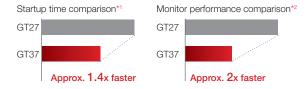
## The Smoothest and Most Beautiful GOT Ever

## The clear and beautiful display offers smooth operability



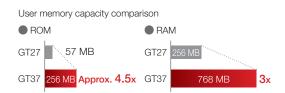
## Faster startup and improved monitor (communication and drawing) performance

Parallel processing by the built-in multi-core CPU shortens startup time and ensures smooth screen operation, even during high-load processes such as logging, scripting, and alarm management.



## **Expanded user memory capacity**

Reliable memory capacity allows project data to be saved without worrying about storage limitations.



<sup>\*1</sup> Results from our company's test environment.

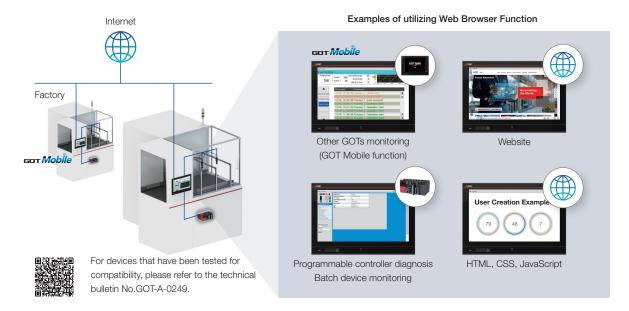
<sup>\*2</sup> Results from our company's test environment (during high-load processing).

## Configure and monitor controllers with GOT



## **Web Browser Function**

GOT3000 enables you to monitor and configure controllers that have a web server function. It also supports browsing websites.



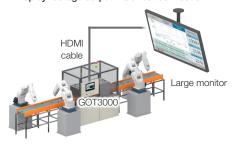
## **Easier Andon display**



## **Built-In Digital Video Output Interface**

- With a single HDMI cable, display GOT screen on a large monitor.
- Displaying a screen different from the GOT screen is supported.
- It can be used for Andon system information sharing.

## Display footage output via direct connection



## Check the camera footage on the control panel



## **Direct Web Camera (USB Camera) Connection**

- A camera can be connected with a single USB cable, allowing the live feed to be displayed on GOT.
- With the recording and playback function\*1, verify machine conditions through camera footage when problems occur. [Future Support]
- \*1 A separate license purchase is required.

## Camera footage output via direct connection Web camera USB Cable GOT3000

Add-on projects (sample screens) are also available for immediate use.

 $\longrightarrow$  See page 17 for details

## **NETWORK**

## **Overcoming Network Barriers**

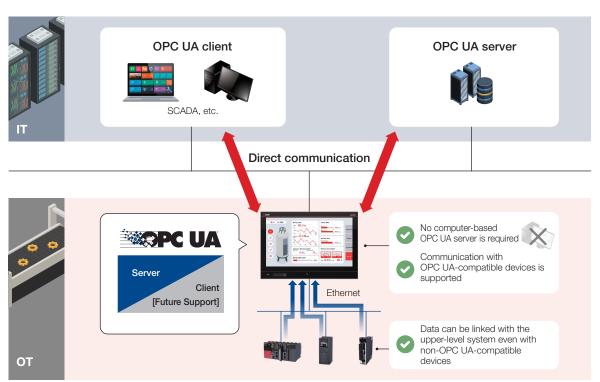


## Enabling IoT for equipment using GOT as a gateway to IT systems



**OPC UA Client Function** [Future Support]

- With the built-in OPC UA server, GOT3000 serves as a gateway, enabling data integration between IT and OT systems.
- Secure communication between IT and OT systems can be achieved.



## Connectable with various devices, enabling smooth monitoring Contactless Tag When using GOT Mobile function, just tap the mobile device to read the necessary information for connection and start monitoring.

## GDT Mobile

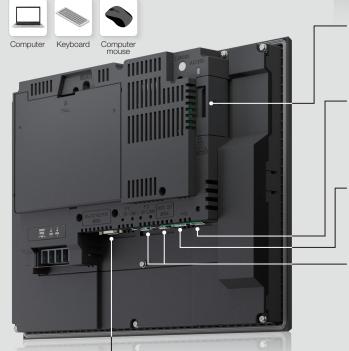


See page 21 for details

## USB Type-C (Device/Host)

A computer or USB devices can be connected. Project data can be transmitted without opening

the control panel.



**SD Memory Card Interface** 

Data area can be expanded with an SD memory card.

C 4 « ( ) »

## **USB Type-A (Host)**

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Output Frequency 70 Hz

USB-compatible devices can be connected.



## NEW

## **Digital Video Output**

Output the GOT screen by connecting it to an external monitor with an HDMI cable.

### NEW

## Ethernet (1000BASE-T) CC-LinkIETSN PC UA





USB memory

0 % 2

80 Hz

Two ports come as standard.

CC-Link IE TSN (Class A) is supported for Port 1 only.

## **FA Devices**









Mitsubishi/Non-Mitsubishi Inverter

Servo

## **Ethernet Connectable Devices**



Computer





## High performance monitoring

Mitsubishi/Non-Mitsubishi programmable controllers

FA Devices\*

Performance for monitoring multiple devices has improved, enabling stress-free monitoring.

Serial (RS-232/422/485)

Monitor performance comparison (when multiple devices are connected via Ethernet)\*3



## Fast project data transfer



Transfer time comparison (via USB Type-C)\*3



- \*1 Only MODBUS/RTU devices are supported for now. Other devices are Future Support.
- \*2 Future Support.
- \*3 Results from our company's test environment.

## Build a secure network environment at a low cost

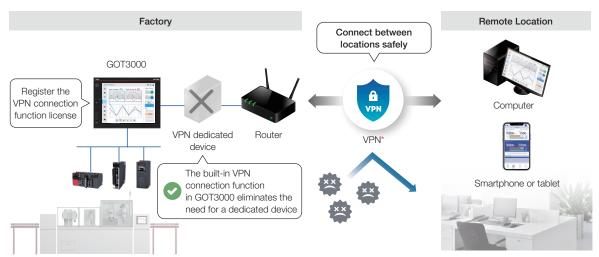


## **VPN Connection Function**

License required

- Highly secure communication is achieved with VPN connection when monitoring or maintaining equipment remotely through the Internet.
- The built-in VPN functionality in GOT3000 eliminates the need for a dedicated VPN device, enabling cost-effective, secure remote monitoring.





<sup>\*</sup> Based on a Secomea A/S remote access solution and requires a separate contract with Secomea A/S.

## Access with Ease & Peace of Mind

## Easily Conduct Remote Monitoring



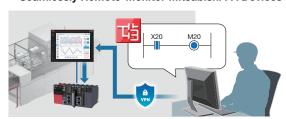
## Securely Update Project Data



## Safely Read/Write Resource Data



## Seamlessly Remote-Monitor Mitsubishi FA Devices



## **Enhance equipment security**

Protect equipment by using GOT3000's various security features.



## (!) GOT data tampering, information leaks

## Data Protection

## >> NEW Information Protection Function

Protect confidentiality by setting passwords for files that are information assets, such as logging data and operation log data.

This restricts unauthorized third parties from accessing or modifying files.

## >> NEW Encrypted Communication

Encrypted communication between the computer (GT Works3) and GOT prevents the leakage of assets such as project data.



## >> NEW Enhancing Remote Connection Security

GOT Mobile function and the VNC server function now support encrypted communication. Secure remote access is possible through an encrypted communication path.



## Unauthorized access to GOT through network

## Network Protection

## >> IP Filter Function

Access from specified IP addresses can be allowed or blocked.



## Unauthorized operation on GOT Screen

## Operation Limitation

## >> Operator Authentication Function

- The screens and functions available for operation and display can be restricted for each operator.
- Login can be managed with GOT.



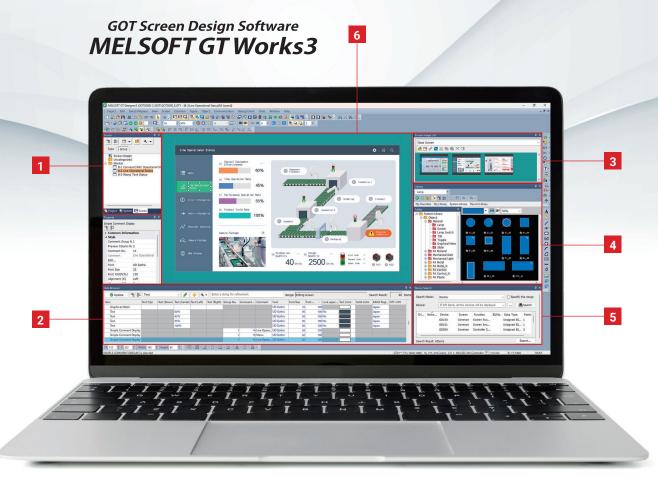
Login with operator's name and password



## **ENGINEERING**

## **Engineering with Ease**





## 1 Work Tree

Manage and configure for each screen, system, and project.

## 3 Screen Image List

View each screen as an image, making screen search simple.

## 5 Device Search

Quickly search for the devices and labels in use.

## 2 Data Browser

Directly view and edit properties of multiple objects across the entire project.

## 4 Library

Create professional screens using a wide variety of parts and frame animations.

## 6 Screen Editor

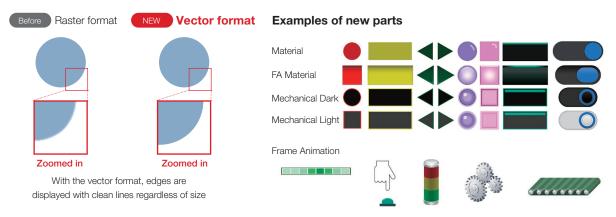
Design efficiently with various functions that minimize man-hours in screen creation.



## Choose from abundant and beautiful parts



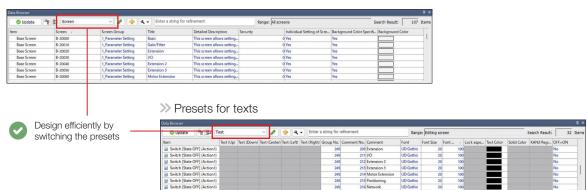
- Many new parts in vector format have been added. Vector parts can be specified in full color, and their quality remains consistent even when zoomed in and out. Additionally, the file size remains small even with large parts.
- NEW Frame animation is supported, making it easier to convey information. In addition to the frame animations registered in the library, other animation files (PNG, APNG, GIF) can also be imported.



## Design efficiently with batch editing



- All the settings within the project can be displayed collectively and edited directly. This allows efficient review and modification of data, even if there are many screens or settings.
- NEW By changing and switching the display items of the data browser using presets, you can design efficiently. For example, you can switch to a screen-specific preset when editing screen settings, and to a text-specific preset when modifying text settings. Users can also create custom presets.
- >>> Presets for screens



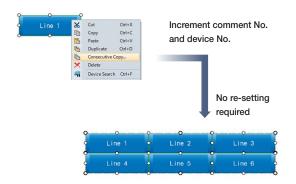
## **Enhanced copy function**



## **Consecutive Copy**

- Multiple figures and objects can be copied at once.
- When copying, information such as device numbers can be incremented based on the original data, reducing the effort of reconfiguration.





## **Efficient scripting**

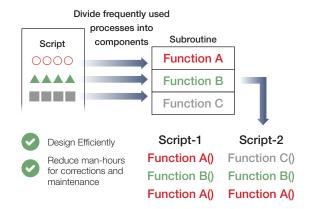


## **Subroutine of the Script**

A process can be divided into reusable components (subroutines). By using these subroutines, development becomes more efficient.

### Script:

A language-type program similar to C language, capable of controlling the display of GOT.



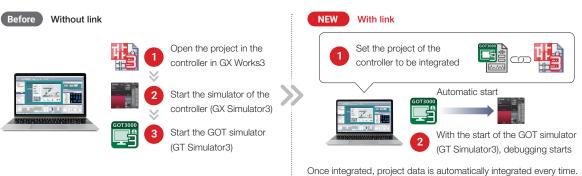


## Debug from your desk even without GOT unit



## Simulator (GT Simulator3)

- Operations of GOT can be simulated on a computer using the simulator (GT Simulator3).
- By specifying the project of the controller to be integrated in advance in the GOT project, the simulator of the controller (GX Simulator3) will automatically start when you start the GOT simulator (GT Simulator3), allowing you to begin debugging immediately.





## Reuse to reduce design man-hours

Add-on projects (sample screens) ready for immediate use are provided, featuring designs with excellent visibility and usability.

## Add-On Project for Connections $\longrightarrow$ See page 28 for details







Inverter connection (FR-E800-E)





\* For the latest add-on projects, please contact your local sales office.

## **Add-On Project for Functions**

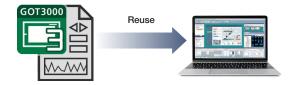


Web camera (USB connection)

## Reuse the project assets easily

## **Utilize Data**

Existing project data for GOT3000 is reusable on a project or screen basis.





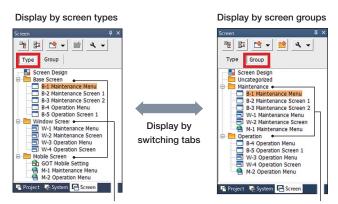
## Management

## Manage projects easily



## **Screen Tree**

- It is possible to display a list of created base screens, window screens, and mobile screens, and to create new ones or edit existing ones.
- NEW Group related screens together to keep the project organized.



Displayed by base screen, window screen, and mobile screen

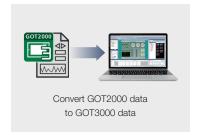
Grouped by maintenance, operation and other categories

## Easy machine upgrades



## **Entirely Replaceable Without Spending Many Man-Hours**

## Project data for GOT2000 is reusable



The panel cut dimensions of the replacement model are compatible



Extension units and connection cables are reusable



## **Benefits of Replacement**

- The high-quality display enhances visibility and information accuracy.
- Enhanced functionality allows for the adjustment and monitoring of controllers without a computer, improving maintainability.
- Faster monitoring response, communication, and startup.
- Gain peace of mind with many security features.

## Panel cut compatibility with GOT2000 series

GOT3000 series has the same screen size and panel cut dimensions as the GOT2000 series, so no changes to the mounting holes are necessary.

GOT30	000 Series	GOT2000 Series
15.6" widescreen	GT3715-FHCBD	_
12.1" widescreen	GT3712-WXCBD	Same dimensions as GT2712 and GT2512-S.
12.1"	GT3712-XRBA, GT3712-XRBD	Same dimensions as GT2712 and GT2512-S.
10.4"	GT3710-XRBA, GT3710-XRBD	Same dimensions as GT2710, GT2510-V, and GT2310.
8.4"	GT3708-XRBA, GT3708-XRBD	Same dimensions as GT2708, GT2508, and GT2308.







## **GOT** Solutions

## **INDEX**

Remote Solutions	P.20	MELSEC
GOT Mobile Function	P.21	Interactive Solutions
Mobile application Pocket GOT	P.21	Web Browser Function
VNC Server Function	P.22	Sequence Program Monitor Fur
Remote Personal Computer Operation		[Future Support]
(Ethernet) Function [Future Support]	P.22	System Launcher Function [Future
HMI Software GT SoftGOT3000	P.23	MELSEC iQ-R Camera Recorde
Multi-Channel Function	P.23	Module Connectivity [Future Supp
SoftGOT-GOT Link Function [Future Support]	P.23	

Maintenance Solutions	P.24
Operation Log Function	P.24
Sound Output Function	P.24
Speech Synthesis Function (GT Designer3)	P.24
FA Transparent Function	P.25
Equipped with Non-volatile RAM	P.25
Backup/Restore Function [Future Support]	P.25

Web Browser Function	P.26
Sequence Program Monitor Function	
[Future Support]	P.26
System Launcher Function [Future Support]	P.27
MELSEC iQ-R Camera Recorder	
Module Connectivity [Future Support]	P.27
GOT Drive Control	
Interestive Calutions	D.00
Interactive Solutions	P.28
Servo	P.28
Inverter	P.30

P.26

## **GOT Solutions**

## Remote Solutions

Improve work efficiency from startup to maintenance with remote monitoring.



## Monitor according to your requirements

Monitor the site with remote visualization solutions suited for your application.

## **Application examples**

## Startup and Adjustment



Adjusting the equipment remotely, away from the control panel



Remote monitoring comparison

Multiple people working simultaneously

## Operation



Visualizing with a large screen



Checking from the office

## Maintenance



Checking from remote locations



Equipment recovery while consulting the manual on the computer

### ●: Supported —: Not supported

	•			0.00000	
	Monitor and Operat	Monitor and Operate Computer from GOT			
Item	GOT Mobi	le Function		SoftGOT-GOT	Remote Personal Computer
	GOT	SoftGOT	VNC Server Function	Link Function [Future Support]	Operation (Ethernet) Function [Future Support]
Simultaneous Client Connections	Max. 5	Max. 15	1	Max. 7*1	_
Display Different Screens for each Client	•		— Display GOT screen as is	•	_
Simultaneous Operation Prevention (Exclusive Control of Operational Authority)		•	•	•	_
Screen Creation for Remote Monitoring	Required*3		Not required	Not required	-
Viewing Application	Web b	rowser	VNC viewer*2	SoftGOT	GOT screen
License	Register to GOT	Register to SoftGOT	Register to GOT	Register to SoftGOT*4	Register to GOT

- \*1 Simultaneous connection is supported only when GOT network interactive function is used.
- \*2 Regarding the VNC client software that has been operation-verified, please refer to the technical bulletin No.GOT-A-0234.
- \*3 The screen is created using GT Works3 (GT Designer3). Screens designed for GOT are reusable.
- \*4 GT SoftGOT3000 license is required.

Technical Bulletin



## Remotely monitor the site using web browser





## **GOT Mobile Function**

License required

- The equipment can be monitored and operated through a web browser on a computer or a mobile device.
- Monitoring the equipment through a web browser eliminates the need for specific software applications or hardware. This allows the system to be built without incurring additional costs.

## **System configuration**



\*1 By registering one license on GOT or SoftGOT, GOT can be simultaneously connected by up to 5 clients, and SoftGOT can be simultaneously connected by up to 15 clients.

## Notifications by Sound and Vibration



## **Mobile application Pocket GOT**

- This is a mobile app for GOT. When installed on a mobile device, the app sends push notifications with sound or vibration if an error occurs in the monitored GOT. Important information won't be missed.
- With GOT, you can easily build a system that notifies of errors.
- In the mobile app Pocket GOT, you can register up to 20 GOTs to be monitored.

## Achieved at no cost by using the free app



## Easy monitoring with the same screen as GOT



## **VNC Server Function**

License required

- The GOT screen at a remote site can be displayed and operated as it is on a computer or a mobile device.
  There is no need to create a separate display screen.
- The GOT screen can be checked directly from the office when a problem occurs, allowing the on-site situation to be quickly understood and promptly addressed.
- NEW SSH port forwarding communication is supported, enabling more secure remote access through an encrypted communication route.

## Remote monitoring from the office



### Remote monitoring from outside the cleanroom



## System configuration

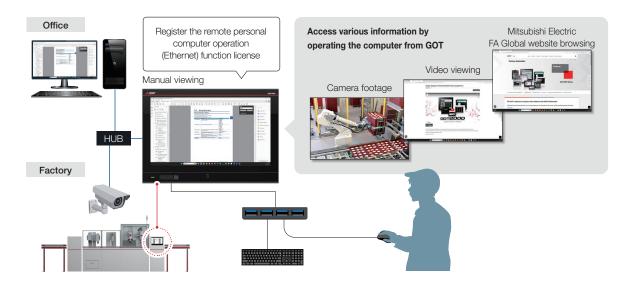


## **Access computer information from GOT**

## Remote Personal Computer Operation (Ethernet) Function [Future Support]

License required

- The computer can be remotely operated from GOT, making manuals and drawings in the computer accessible at the production site.
- When a problem occurs, you can refer to the recovery manual on the computer to proceed with recovery work, enabling swift troubleshooting.



Manage both GOT and the production site with your computer

## **HMI Software**

**GT SoftGOT3000** 

License required\*

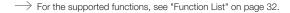
\* A license key (for the USB port) is no longer needed. The license is now registered electronically.



## What can be done with GOT can also

be done on your computer

- Production line monitoring is possible on a computer with a screen equivalent to GOT.
- Similar to the GOT screen, the screen is created using GT Works3. Furthermore, project data for GOT can be converted for use on different models.





## Integrated monitoring of multiple lines

## **Multi-Channel Function**

- Information from multiple lines can be checked and centrally monitored on a single computer.
- One SoftGOT can connect to up to four-channel controllers.



Non-Mitsubishi programmable controllers

Mitsubishi programmable controller

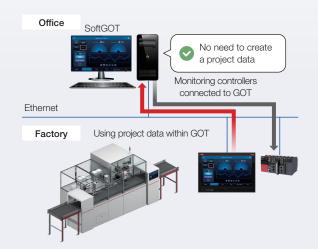


## With GOT On-Site

## Monitor using the same screen as the on-site GOT

**SoftGOT-GOT Link Function** [Future Support]

- If there is a GOT on-site, SoftGOT can use the on-site GOT data for remote monitoring.
- The use of the data from the on-site GOT eliminates the need to create screens for SoftGOT.



## **GOT Solutions**

## Maintenance Solutions

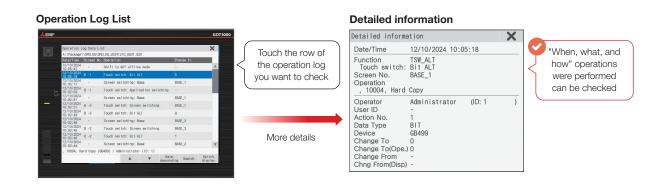
Reduce man-hours with the various functions that support maintenance work.



## Enhanced traceability enables quick troubleshooting

## **Operation Log Function**

- Check details of what, when, and how operations were performed on GOT.
- When used with the operator authentication function (page 13), the person who performed operations on GOT can be tracked, enabling guick identification and resolution of issues.
- Operation logs can be accessed on a computer, facilitating the analysis of trouble cause tendencies.



## Information is conveyed more effectively through audio

### **Sound Output Function** Speaker with a built-in amplifier Speech Synthesis Function (GT Designer3) License required Operators can be notified with a voice alert when Messages are available 部品を交換して Please replace an event occurs in the equipment. In addition to in 6 languages ください。 the part. visual notifications, voice alerts help deliver se (Traditional) Chinese (Simplifi instructions to operators when action is required. 請更換零件。 请更换部件。 Melodies or custom messages will be played depending on the situation. Reemplace el pieza, 부품을 교환하십시오. por favor.

## Convenient access for machine maintenance

## **FA Transparent Function**

- Use GOT as a pass-through connection to access controllers inside the control panel.
- There is no need to open the control panel to connect the computer to the controllers.





## Retain important information even without a battery



## **Equipped with Non-Volatile RAM**

No battery is required to retain data such as logging data and alarm data.

\* A battery is required when backing up clock data.

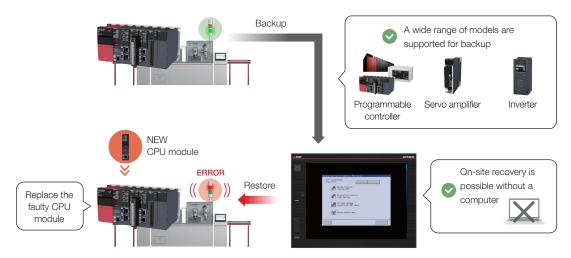


Important data is retained

## Quick recovery with on-site GOT, no computer needed

## Backup/Restore Function [Future Support]

- GOT can backup/restore program and parameters of connected controllers.
- When replacing equipment due to failure, restore the backed-up data using GOT to quickly return the machine to operating condition.



<sup>\*</sup> Because it is scheduled for future support, the actual screen image may differ.

## **GOT Solutions**

## **MELSEC**

## **Interactive Solutions**

Check the status of the programmable controller without a computer and optimize maintenance work efficiency.



## Quickly view programmable controller status



## **Web Browser Function**

CPU module equipped with the web server function

The status of the CPU module can be checked by displaying the web page of the programmable controller's web server function.



Detailed module information (MELSEC iQ-R)

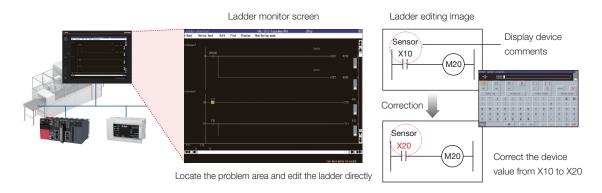


CPU diagnosis (MELSEC iQ-F)

## Check programmable controller errors in ladder format

## Sequence Program Monitor Function [Future Support]

- When an error occurs, identify the cause or equipment's error by checking the sequence program in a ladder diagram format on GOT.
- Modifying the device current values and ladder program editing is also supported.

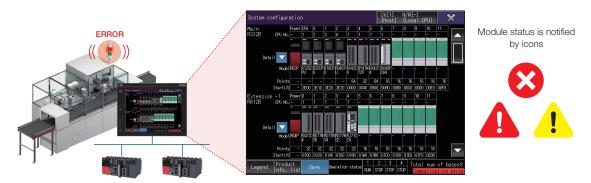


<sup>\*</sup> Because it is scheduled for future support, the actual screen image may differ.

## Quickly identify programmable controller module errors

## System Launcher Function [Future Support]

The system configuration of the programmable controller connected to GOT can be checked graphically. You can confirm the product information, such as the serial numbers of each unit, without a computer with a dedicated engineering tool installed.

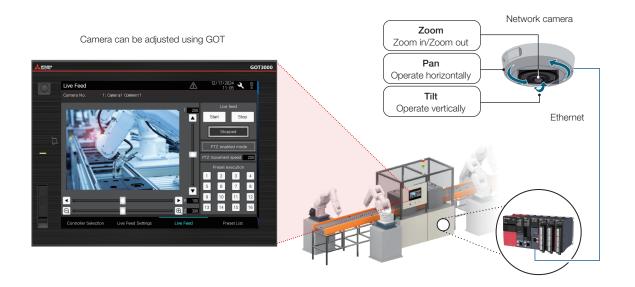


<sup>\*</sup> Because it is scheduled for future support, the actual screen image may differ.

## Adjust the system recorder camera without a computer

## MELSEC iQ-R Camera Recorder Module Connectivity [Future Support]

- When introducing the system recorder to the equipment, startup operations can be performed quickly by checking the live camera feed on GOT and adjusting the camera position (PTZ control).
- In addition to startup operations, the live camera feed can be checked on the GOT during troubleshooting, which helps identify the cause.



Add-on projects (sample screens) are also available for immediate use.

→ See page 17 for details

## **GOT Solutions**

## **GOT Drive Control** Interactive Solution (Servo)

Enhance work efficiency from startup to maintenance by checking the status of the servo system without a computer.



## Monitor and configure multiple servo amplifier axes with a single GOT

Previously,

the servo settings were configured, adjusted, diagnosed using

MR Configurator2 Computer



- » Computer was required
- » Connecting to the servo amplifier was troublesome

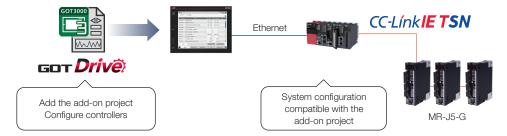
Now, these tasks can be handled using





- Configure, adjust, and diagnose multiple axes using a single GOT\*1
- Work can be done immediately on-site
- \*1 Supports some of the functions of MR Configurator2.

## Immediately available with the add-on project (sample screen)



## Enhance work efficiency with the easy-to-use screen

Parameters for multiple axes can be monitored and set on a single screen.



Monitoring and setting of multiple axes



Register monitoring target (MR-J5-G: Up to 768 axes)



>> MR-J5-G(4) >>MR-J5W-G

>> MR-J5-B(4)

Add-on project Add-on project ≫MR-J5D-G4

MELSERI/O-J4

>>MR-J4-B(4)

≫MR-J4W-B >> MR-J4-GF(4)

≫MR-J5W-B \*1 If the model doesn't have an add-on project, users can create their own screens for monitoring and setting.

## Startup and adjustment

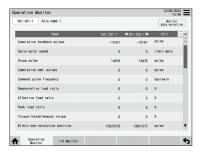
## Parameter settings

Display and edit the servo amplifier parameters.



## Monitoring

Check the status of the operating servo amplifier.



## One-touch tuning

Adjust the servo gain according to machine characteristics by simply turning on onetouch tuning function.



## **Tuning**

In addition to automatic tuning, manually fine-tune the control gain for better performance.



### **Test operation**



Preventive

maintenance

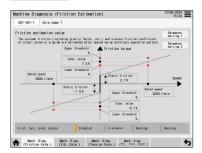
Ensure proper machine functioning before it goes to full operation.



## Predictive maintenance

## Machine diagnosis

Check the failure predictions diagnosed by the servo amplifier.



## Life diagnosis

Check the estimated time for servo amplifier repair or replacement. Diagnostic results for multiple axes can be batch output for later review.



## Alarm display

Corrective

maintenance

Examine the active alarms of the servo amplifier. The alarm history can be also reviewed.



All the screens above are the sample screens for MR-J5-G and MR-J5W-G. As updates are made regularly, the screens may differ from those in this catalog, and some function screens are not presented here.

## GOT Solutions GOT Drive Control Interactive Solution (Inverter)

Boost work efficiency from startup to maintenance by checking the inverter's status without a computer.

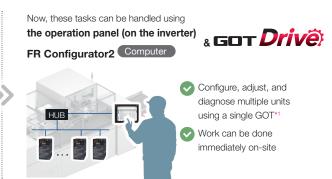


## Monitor and configure multiple inverters with a single GOT



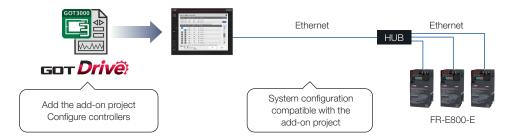


 Each unit had to be configured individually
 Connecting to the inverter was troublesome



\*1 Supports some of the functions of FR Configurator2.

## Immediately available with the add-on project (sample screen)



## Improve work efficiency with the easy-to-use screen

Parameters for multiple units can be monitored and set on a single screen.



Monitoring and setting of multiple inverters



Register monitoring target (FR-E800-E: Up to 64 units)

≫FR-E800-E

Add-on project

≫FR-A800-E

>>FR-A800-E Plus

≫FR-F800-E

## Startup and adjustment

### Parameter settings

Display and edit the inverter parameters.



## Parameter settings (Bookmark)

Display and edit only the bookmarked parameters



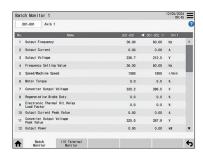
### **Operation command**

Operate the inverter by executing drive commands



### **Batch monitoring**

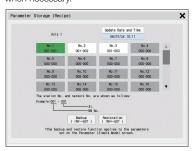
Monitor inverter information collectively.



### Parameter saving

Preventive

Save parameter information and restore it when necessary.

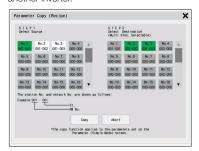


### Parameter copy

Corrective

maintenance

Copy the backed up parameter information to another inverter.



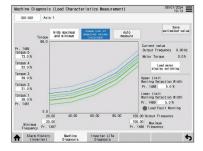
## Maintenance

## Predictive maintenance

## Machine diagnosis

(Load Characteristics Measurement)

Verify the load conditions and fault detection diagnosed by the inverter.



## Life diagnosis

Check the estimated time for inverter repair or replacement. maintenance Diagnostic results for multiple units can be batch output for later review.



### Alarm display

Examine the active alarm of the inverter. Reviewing the alarm history is also possible.



All the screens above are the sample screens for FR-E800-E. As updates are made regularly, the screens may differ from those in this catalog, and some function screens are not presented here.

<sup>\*1</sup> If the model doesn't have an add-on project, users can create their own screens for monitoring and setting.

●: Supported ▲: Supported only on certain models -: Not supported

0-			Item		△: Condition	nally required	GT37 Wide	OT07	CT C-#COT2000	OT07
Ga	tegory			License	External storage	G137 Wide	GT37	GT SoftGOT3000	GT27	
		15.6" widescr	reen	NEW		Storage	•	_		_
	Screen size	12.1" widescr		NEW			•	_		_
	en en	12.1"					_	•		•
	Size	10.4"					_	•		•
		8.4"					_	•		•
	Resolution	Full HD 1920	x 1080	NEW			•	_	Long side:	_
	Sel Li	WXGA 1280 >	x 800				•	_	640 to 1920 Short side:	_
	lion	XGA 1024 x 7	768				_	•	480 to 1200	<b>A</b>
	Color	16 million colors NEW								
	ğ	16 million colors NEW				_		•	_	
_	Simul	taneous press (2 points)				•	_	_	•	
Hardware specifications	Huma	an sensor					_	GT3712-X only	_	<b>A</b>
dwa										256 MB
s en		User memory	, RA	M				768 MB		(GT2705-V: 80 MB)
pec	Memory	Oser memory	RC	M				256 MB		57 MB
ifica	ž	Niew weletile E						•		(GT2705-V: 32 MB)
ation		Non-volatile F		NEW				-	Computer I/F	_
S		RS-232/422/4	485				RS-232/4	22/485 x 1	required	RS-232 x 1, RS-422/485 x 1
			Po	rt 1				ASE-T,	Computer I/F	100BASE-TX
		Ethernet						Class A) supported	required	TOOD/IOE TX
	Built-in interface		Po	π 2				BASE-T	_	Device: USB 2.0 x 1, USB Mini B
	<u>₽</u> .	Front USB (de	vice/host)	NEW			USB 3.2 gen1 x	1, USB Type-C	_	Host: USB 2.0 x 1, USB Type-A
	inte	Rear USB (ho	net)				LISB 3 2 gen1 v	x 1, USB Type-A	Computer I/F	USB 2.0 x 1, USB Type-A
	nfac	<u> </u>					_		required	00B 2.0 X 1, 00B 1ypc 71
	ď	Digital video output NEW						•	- Computer	_
		SD memory card					•		Computer virtual drive	•
		Contactless tag						•	_	_
		Extension I/F							_	•
		Figure					•	•	•	•
		Logo text							•	•
		UD font NEW						•	•	-
		Touch switch							•	
		Numerical dis	plav.							
		Numerical inp	out				•		•	•
		Text display, T						•	•	•
		Date display,		olay		Δ.			•	•
		Comment dis Parts display	ріау			Δ	· `			•
	Figure/	Frame animat	tion	NEW					•	_
		Historical data				Δ			•	•
	) bje	A	larm disp	olay (user)		Δ			•	•
	Object function		larm disp	olay		Δ		•	•	•
CO	not	dieplay	system)	rm display					•	•
Screen design	o D			arm display					•	•
en c		Recipe display						•	•	•
lesio		Graph							•	•
gn		Historical tren				Δ	•	•	•	•
		Graphical met	ter						•	•
		Meter Slider							•	•
			ocument	t converter						
		Document	utput file			0			•	•
		P	DF file			0		Support]	[Future Support]	•
		Script part				Α.			•	•
		Logging Recipe				Δ		<u> </u>	•	•
	Fun #	Device data tr	ransfer						•	•
	ctio ne ba	Trigger action							•	•
	ns r ack	Time action				Δ			•	•
	Functions running in the background	Hard copy F	ile output	t G)		0			•	•
	ing	Project/Scree	BMP, JPE en script	-G)					•	•
		Object script	conpt						•	•
		,								

			O: Required					
ategory	Item		△: Conditionally required		GT37 Wide GT37		GT SoftGOT3000	GT27
			License	External storage				
	Barcode fu	nction					•	•
	RFID function				(	•	•	•
	GOT Mobile		0	Δ		<u> </u>	•	•
	Web brows VNC server		0				_	_
		rsonal computer			<u>_</u>		_	
		Ethernet) function	0		[Future :	Support]	_	•
		WEB camera				•	_	_
	Digital image	(USB connection) NEW						
	input	Computer			•		_	Extention unit required
	function	Network camera	0		(Future 5	Support]	_	_
Fun	Digital image	(Ethernet connection) NEW WEB camera			Įi diaio (			
ctio	Digital image recording	(USB connection)	0	0	[Future :	Support]	_	_
ns L	and playback	Network camera	_	_				
using peripher	function	(Ethernet connection)	0	0	[Future s	Support]	_	_
g pe	External I/C	1 function			[Future :	Support]		•
riph Ph	External I/C	Tunction				init required	_	Extention unit required
leral	Operation p	anel function				Support] Init required	[Future Support]	Extention unit required
dev	Imaga auto	ut function						<u> </u>
Functions using peripheral devices	Image outp	at runicion					_	Extention unit required
07	Sound outp	out function					•	Extention unit required
	VPN conne	ction function NEW	0			•	_	—
		s tag function NEW				•	_	_
		rver function NEW				•	[Future Support]	_
	OPC UA cli	ent function NEW			[Future :	Support]	[Future Support]	_
	Server func	tion			[Future :	Support]	[Future Support]	•
	Client funct	ion			[Future :	Support]	_	•
	Mail send fu	unction			[Future 3	Support]	[Future Support]	•
	FTP server	function		Δ	[Future :	Support]	_	•
	File transfer (	FTP client) function		0	[Future :	Support]	_	•
	USB mouse,	USB keyboard function				•	•	•
	Base scree	n			•		•	•
	Window sc				•		•	•
	Mobile scre				(		•	•
	Language s				(		•	•
	System info					•	•	•
	<u> </u>	uthentication		Δ		•	•	•
		rotection function NEW				•	•	_
		munication function NEW		_		•	•	
	Operation lo	og		0	•		•	•
90	Startup log	0			Fade-in/Fade	e-out function ext	pansion available	•
GOT functions	Kana-Kanii/	Pinyin conversion				Support]	[Future Support]	•
Inct	FA transpar				į. 2.12.10 ·		-	•
ions	SoftGOT-G				[Future :	Support]	[Future Support]	•
U)	Backup/Re	store function		0		Support]	[Future Support]	•
	Multi-chann					annels	4 channels	4 channels
	Station No.	switching					•	•
		k interaction function			[Future :	Support]	[Future Support]	•
	Screen ges	ture function			•	_	_	•
	Object gesture function				•	Some functions are unavailable	-	•
	IP filter fund	tion					_	•
	Vertical disp						_	•
		gram monitor (iQ-R ladder)		0		Support]	_	•
-		gram monitor (iQ-F ladder)		0		Support]	_	•
Vai		gram monitor (Q/L ladder)		0	[Future :	Support]	_	•
nte		TSN/CC-Link IE Field			[Future :	Support]	_	•
	network dia				-			
nan	Inteligent ur				-	Support]	_	•
nance		OTILO		^		Support] Support]	_	
nance fun	R motion m			Δ	ı ıruture :	ουρροπ]		•
nance functic	Log viewer							•
Maintenance function		ncher		0	[Future	Support] Support]	Future Support]	•



-: Not supported

## **GT37 Wide**





Category		Item		GT3715-	FHCBD		GT3712-WXCBD		
		Display device			-	TFT color LCD			
		Screen size		15.6" wic	escreen		12.1" widescreen		
				Full I			WXGA:		
		Resolution		1920 x			1280 x 800		
	Display	0		344.2 x 1	93.6 mm		261.1 x 163.2 mm		
	section*1	Screen size (W x H)		13.55 x	7.62 in.		10.28 x 6.43 in.		
		Display color			1	6 million colors			
		Brightness adjustment				32 levels			
		Backlight			LEC	(not replaceab	ole)		
		Backlight life				000 hours or mo	. '		
		Type				ected capacitiv			
	Touch panel	Simultaneous press				p to two points			
	Touch panel	Life				p to two points			
	Danal calar	Lile				Plank			
	Panel color					Black			
	Human sensor	<u>'</u>			544				
Pe	Memory capac	Memory capacity (user memory)				M: 2 GB (768 M			
D D	, ,					: 512 MB (256			
Performance specifications	Battery			G	T11-50BAT lit	hium battery (so Clock data	old separately)		
inc	Sattory	Backup target							
O O		RS-232/422/485	1 ch		38400, 19200, 9600, 4800 bps				
De C		110 202/422/400					232 or RS-422/485		
)ifi		Ethernet		2 channels, RJ45 (modular jack), 1000BASE-T, 100BASE-TX, 10BASE-T					
atio		USB (device/host)	1 channel, USB Type-C, USB 3.2 gen 1						
ong	Built-in interface	USB (host)		B 3.2 gen 1					
0,		Digital video output				HDMI connect			
		SD memory card				1 channel			
		Contactless tag				1 channel			
		Extension I/F			For comm		opposition		
		EXTENSION I/F	For communication unit connection						
	Buzzer sound		Single tone (pitch and duration adjustable)						
	Power LED	<u> </u>	Yellow-green						
	FOWEI LLD						A Time 4V		
	Protective stru	cture	Front: IP66F, IP67F, NEMA Type 4X Enclosure interior: IP2X						
	Safety standar	 de	CE, UL, cUL, KC						
				397 x 276	316 x 244 x 63 mm				
	External dimer	sions (W x H x D)		15.63 x 10.8			12.44 x 9.61 x 2.48 in.		
				383.5 x 2	302 x 228 mm				
	Panel cutting of	limensions (W x H)		15.1 x 1			11.89 x 8.98 in.		
				2.7			2.1 kg		
	Weight (excl. the	ne installation fittings)		6.0			4.6 lb		
	Ambient opera	ting temperature				0°C to 55°C			
Ge		ge temperature				-20°C to 60°C			
ner		ting/storage humidity				90% RH, non-c	condensing		
General spe	7 arribiont opera	ang storage numbers	Compliant	Frequency	Acceleration	Amplitude	Sweep count		
pe			Compliant with JIS		, wooder all OFF	· ·	Oweep count		
	Vibration resist	ance	B 3502 and	5 Hz to 8.4 Hz	_	3.5 mm	X, Y, or Z 10 times in each direction		
cati			IEC 61131-2	8.4 Hz to 150 Hz	10 m/s <sup>2</sup>	_	7, 1, 01 2 10 111100 111 00011 0110011		
cifications					ompliant with	JIS B 3502 and	JIFC 61131-2		
U)	Shock resistan	ce					, or Z directions		
<b></b>	Downer	voltage			, ,,				
Power supply specifications	Power supply	voitage			24 V	DC (+25%, -20	J%)		
.ver cifi	Dower or and	fraguanav							
cat	Power supply	requency							
ion pp	Power	Under the maximum load		42 W c	r less		37 W or less		
S <	consumption	Main unit (ref. value)		20		15 W			
	001100111011								

<sup>\*1</sup> As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.

<sup>\*2</sup> If conductive materials such as water or oil adhere to the display, GOT may malfunction. Remove any conductive materials before use.

### **GT37 SoftGOT**









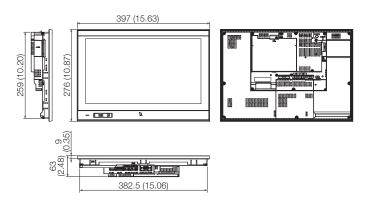
GT3712-XRBA	GT3712-XRBD	GT3710-XRBA	GT3710-XRBD	GT3708-XRBA	GT3708-XRBD	GT SoftGOT3000
	<u> </u>	_				
12	.1"	_				
		XG 1024				Long side: 640 to 1920 Short side: 480 to 1200
246.0 x 1 9.69 x		211.2 x 1 8.31 x 0			28.2 mm 5.05 in.	-
		16 millio	n colors			16 million colors
		32 le	evels			_
		LED (not re	eplaceable)			_
		50,000 hou	urs or more			_
		Analog	resistive			_
			_			_
		1 million toud	ches or more			_
			ack			_
Pyroelec	tric type	_		-		_
		RAM: 2 GE	,			RAM: (768 MB)
		ROM: 512 N				ROM: (256 MB)
	GT <sup>-</sup>	11-50BAT lithium b		tely)		_
			data			
1 ch		n (socket), 115200 ther one channel fr			bps	Computer I/F required
	2 channels, RJ45	(modular jack), 100	00BASE-T, 100BA	SE-TX, 10BASE-T		Computer I/F required
	1	channel, USB Typ	e-C, USB 3.2 gen	1		_
	1	channel, USB Typ	e-A, USB 3.2 gen	1		Computer I/F required
		1 channel, HDMI	connector type A			_
		1 cha	annel	,		Computer virtual drive
		1 cha				_
		For communication	on unit connection			_
	Sii	ngle tone (pitch and	d duration adjustab	ole)		Single tone (duration adjustable) Built-in computer speaker or equivalent required
		Yellow	-green			_
		Front: IP66F, IP67 Enclosure in				_
		CE, UL,	cUL, KC			_
316 x 240 12.44 x 9.4	0 x 61 mm 5 x 2 40 in	303 x 212	2 x 61 mm 5 x 2.40 in.		3 x 61 mm 0 x 2.40 in.	_
302 x 2		289 x 2			76 mm	
	8.98 in.	11.38 x			6.93 in.	_
2.0	kg	1.8	kg	1.5	kg	_
4.4	lb	4.0		3.3	3 lb	_
		0°C to				_
		-20°C t				_
		10% RH to 90% RI	1	T T	T -	_
		Frequency	Acceleration	Amplitude	Sweep count	
Compliant with IEC 61		5 Hz to 8.4 Hz	_	3.5 mm	X, Y, or Z 10 times in each	_
12001		8.4 Hz to 150 Hz	10 m/s <sup>2</sup>	_	direction	
	150 m/s		-			
100 V AC to 240 V AC (+10%, -15%)	24 V DC (+25%, -20%)	100 V AC to 240 V AC (+10%, -15%)	24 V DC (+25%, -20%)	100 V AC to 240 V AC (+10%, -15%)	24 V DC (+25%, -20%)	_
50 Hz/60 Hz (±5%)	-	50 Hz/60 Hz (±5%)	_	50 Hz/60 Hz (±5%)	-	-
45 W or less	39 W or less	39 W or less	33 W or less	38 W or less	33 W or less	_
19 W	17 W	15 W	12 W	15 W	12 W	_
		on 1.400S or later			GT Works3 version 1.400S or later	



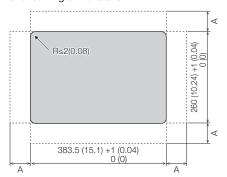
GT37 Wide Unit: mm (in.)

## GT3715-FHCBD

## External dimensions



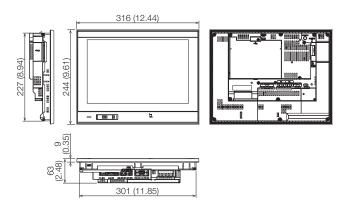
## Panel cutting dimensions



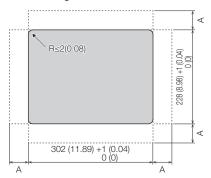
A=15 (0.59) or more Panel thickness: 1.6 to 4 (0.06 to 0.16)

## GT3712-WXCBD

## External dimensions



## Panel cutting dimensions

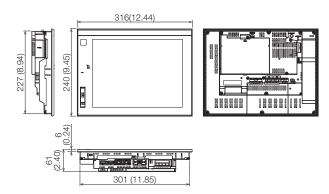


A=15 (0.59) or more Panel thickness: 1.6 to 4 (0.06 to 0.16)

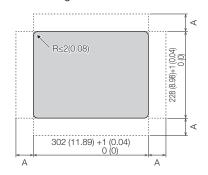
GT37 Unit: mm (in.)

## GT3712-X

## External dimensions



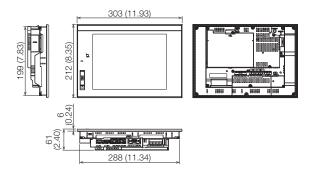
## Panel cutting dimensions



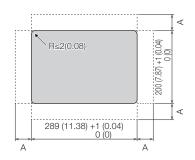
A=15 (0.59) or more Panel thickness: 1.6 to 4 (0.06 to 0.16)

## GT3710-X

## External dimensions



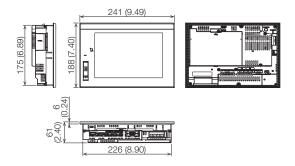
## Panel cutting dimensions



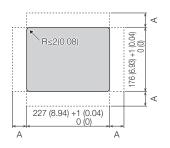
A=15 (0.59) or more Panel thickness: 1.6 to 4 (0.06 to 0.16)

## GT3708-X

## External dimensions

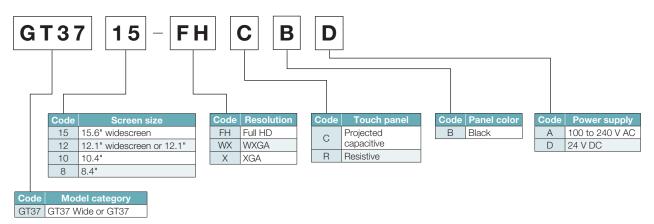


## Panel cutting dimensions



A=15 (0.59) or more Panel thickness: 1.6 to 4 (0.06 to 0.16)

## **GOT Model Name**



## **GOT Base Units**

			Specific	ations			
Category	Model	Screen size resolution	Touch panel	Display color	Panel color	Power supply	Built-in I/F
GT37 Wide	GT3715-FHCBD	15.6" widescreen Full HD	Projected capacitive			DC	
	GT3712-WXCBD	12.1" widescreen WXGA			Black	DC	RS-232/ Ethernet 422/485  Digital video output Extension I/F
	GT3712-XRBA	12.1"				AC	Ethernet 422/485 output Extension I/F
	GT3712-XRBD	XGA		colors		DC	TAG   USB   USB
OT07	GT3710-XRBA	10.4"	Resistive			AC	
GT37	GT3710-XRBD	XGA	Resistive			DC	Type-C Type-A Type-A
	GT3708-XRBA	8.4"				AC	
	GT3708-XRBD	XGA				DC	

## Extension Units Product Model Specifications Compatible model GT37 Extension interface conversion unit GT37-IF2000 Unit for using GOT2000 series and GOT1000 series communication units with the GOT3000 series.

Extension interface conversion unit		GT37-IF2000	Unit for using GOT2000 series and GOT1000 series communication units with the GOT3000 series.	•
8		GT15-RS2-9P	RS-232 serial communication unit (D-sub 9-pin plug)	<b>●</b> *1
্র Serial communication unit		GT15-RS4-9S	RS-422/485 serial communication unit (D-sub 9-pin socket)	●*1
<u>    5</u> .		GT15-RS4-TE	RS-422/485 serial communication unit (terminal block)	<b>●</b> *1
	CC-Link IE TSN communication unit	GT25-J71GN13-T2	Local station (device station) unit	<b>●*1</b>
l l	CC-Link IE Field Network communication unit	GT15-J71GF13-T2	Intelligent device station unit	<b>●</b> *1

<sup>\*1</sup> A separate extension interface conversion unit is required when using with GT37.

## Software

Product	Model	Language	License type	Delivery type
HMI/GOT Screen Design Software MELSOFT GT Works3	SW1DND-GTWK3-EC	English	Site license product*1	DVD
FA Integrated Engineering Software MELSOFT iQ Works*2	SW2DND-IQWK-EC	English	Site license product*1	DVD

- \*1 Available for use only by individuals from the same corporation that purchased the product, its business offices (including overseas offices), public vocational training facilities, or other educational institutions, with no limitations on the number of computers or users.
- \*2 iQ Works is an integrated software suite that includes various engineering software for Mitsubishi Electric FA devices, centered around the system management software MELSOFT Navigator. GT Works3 is one of the software included in iQ Works.



## License for GOT3000

●: Supported —: Not supported

Product		Model	Number of licenses for sale	Delivery type	Compatible model
			licelises for sale		GT37
	GOT Mobile function license for GOT3000*1	GT30-WEBSKEYA1-1	1	License certificate	•
		GT30-WEBSKEYA1-5	5	License certificate	•
Add-on function		GT30-WEBSKEYA1N-1	1	Digital distribution	•
		GT30-VNCSKEYA1-1	1	License certificate	•
	VNC server function license*1	GT30-VNCSKEYA1-5	5	License certificate	•
		GT30-VNCSKEYA1N-1	1	Digital distribution	•
		GT30-VPNKEYA1-1	1	License certificate	•
	VPN connection function license*1	GT30-VPNKEYA1-5	5	License certificate	•
		GT30-VPNKEYA1N-1	1	Digital distribution	•
	GT Works text to speech license*2	SW1DND-GTVO-M	1	License certificate	•

<sup>\*1</sup> Each GOT requires one license.

## License for GT SoftGOT3000

Product		Model	Number of licenses for sale	Delivery type	
		GT3S-SGTKEYA1-1	1	License certificate	
License for CT Coff COTO	se for GT SoftGOT3000*1	GT3S-SGTKEYA1-10	10	License certificate	
License for GT SoftGOTS000		GT3S-SGTKEYA1-20	20	License certificate	
		GT3S-SGTKEYA1N-1	1	Digital distribution	
Add-on function	GOT Mobile function license for GT SoftGOT3000*1	GT3S-WEBSKEYA1-1	1	License certificate	
		GT3S-WEBSKEYA1-5	5	License certificate	
		GT3S-WEBSKEYA1N-1	1	Digital distribution	

<sup>\*1</sup> Each OS requires one license.

## Mobile Applications (for GOT3000, GT SoftGOT3000)

,	, ,
Product	Description
	Download from the App Store or Google Play™.
Pocket GOT	* The app is compatible with iPhone, iPad, or Android™ devices. For information about the
	operating environment, please check the App Store or Google Play™.

## Options

●: Supported —: Not supported

Options	Supported —. Not supported			
Product Model		Description		Compatible model GT37
			• • • • • • • • • • • • • • • • • • • •	
	GT37-15WPSGC	For 15.6" widescreen, projected capacitive touch screen  Antiglare Type Transparent		•
Protective sheet	GT37-12WPSGC	For 12.1" widescreen, projected capacitive touch screen	A set of 2 sheets	•
Frotective sneet	GT37-15WPSCC	For 15.6" widescreen, projected capacitive touch screen	Clear Type	•
	GT37-12WPSCC	For 12.1" widescreen, projected capacitive touch screen	Transparent A set of 2 sheets	•
	GT20-12PCO	For 12.1"		•
Oil-resistant cover	GT20-10PCO	For 10.4"		•
	GT20-08PCO	For 8.4"		•
04	GT15-80STAND	For 12.1" widescreen and 12.1"		•
Stand	GT15-70STAND	For 10.4" and 8.4"	•	
	NZ1MEM-2GBSD	SD memory card for GOT, 2 GB		•
SD mamon Loard	NZ1MEM-4GBSD	SDHC memory card for GOT, 4 GB	•	
SD memory card	NZ1MEM-8GBSD	SDHC memory card for GOT, 8 GB		•
	NZ1MEM-16GBSD SDHC memory card for GOT, 16 GB			•
Battery	GT11-50BAT	For clock data backup*1	•	

<sup>\*1</sup> The clock data is used for functions such as logging. To back up the clock data, please purchase a battery.

<sup>\*2</sup> Each computer requires one license to edit sound files.

Cables

●: Supported —: Not supported

	Product	Model	Cable length (m)	Recommended Product	Specifications	Compatible model GT37
	Panel-mounted USB port extension	GT14-C10EXUSB-4S	1		For routing the USB interface (host) of the GOT rear face to the front side of the control panel	•
DO 4051 1 111 1		FA-LTBGT2R4CBL05	0.5		RS-485 terminal block conversion unit with cable	•
RS-485 terminal block conversion unit	FA-LTBGT2R4CBL10	1	*1 between RS-422/485 (connector) and RS-485	•		
CONVERSION UNIT		FA-LTBGT2R4CBL20	2		terminal block conversion unit	•
RS-422-232 connector conversion cable		GT35-C02HR2-9P	0.2	*2	Connector conversion cable for connecting existing RS-232 cable [D-sub 9 pin ↔ D-sub 9 pin]	•

<sup>\*1</sup> The products are developed by Mitsubishi Electric Engineering Company Limited and sold through your local sales office.

## **Related Manuals**

Title	Number	Delivery type
GT Designer3 (GOT3000) Screen Design Manual	SH-082590ENG	PDF, e-Manual
GOT3000 Series User's Manual (Hardware)	SH-082591ENG	PDF, e-Manual
GOT3000 Series User's Manual (Utility & Maintenance Functions)	SH-082592ENG	PDF, e-Manual
GOT3000 Series User's Manual (Connection)	SH-082593ENG	PDF, e-Manual
GT SoftGOT3000 User's Manual	SH-082594ENG	PDF, e-Manual

<sup>\*2</sup> The products are developed by Mitsubishi Electric System & Service Company Limited and sold through your local sales office.

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