



for a greener tomorrow



**MITSUBISHI  
ELECTRIC**

*Changes for the Better*

FACTORY AUTOMATION

# Graphic Operation Terminal GOT2000 Drive Control (Inverter) Interactive Solutions



## GOT *Drive*



Challenges that cannot be resolved just with the inverter can now be resolved with GOT2000 and inverter interactive functions.

MITSUBISHI GRAPHIC OPERATION TERMINAL

# GOT2000 + INVERTER



MITSUBISHI GRAPHIC OPERATION TERMINAL

## GOT2000 + INVERTER

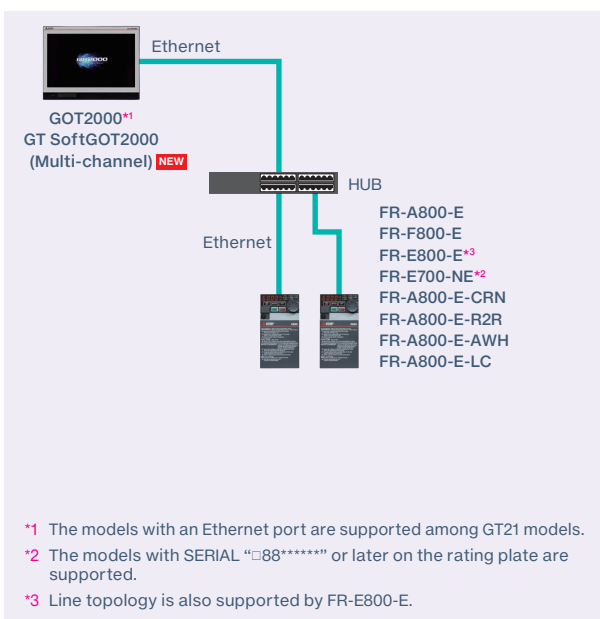
The GOT2000 provides advanced functionality and improves connectivity with Mitsubishi Electric inverter systems. It provides some functions of FR Configurator2.

The GOT Drive enhanced functionality is designed to eliminate need for additional hardware, software and suits customer's applications to realize central monitoring, speed up system startup, improve predictive maintenance and troubleshooting.

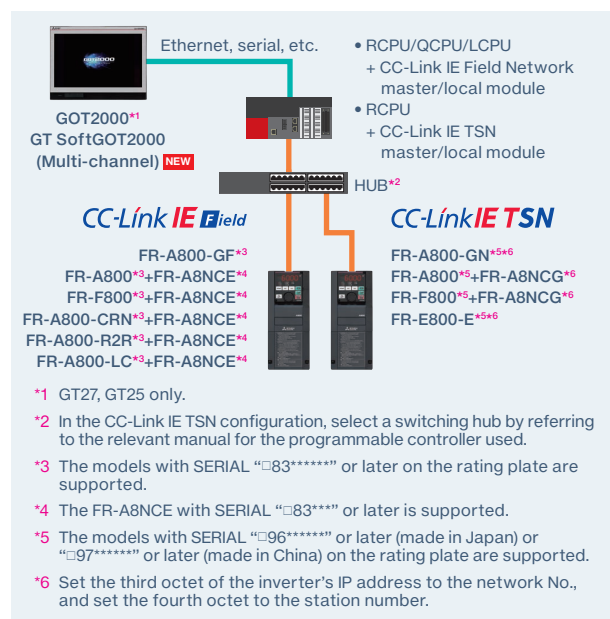
### GOT and inverter system configurations

Select the required connection type to match your system configuration. Multiple inverters can be monitored with one GOT by switching the target station number.

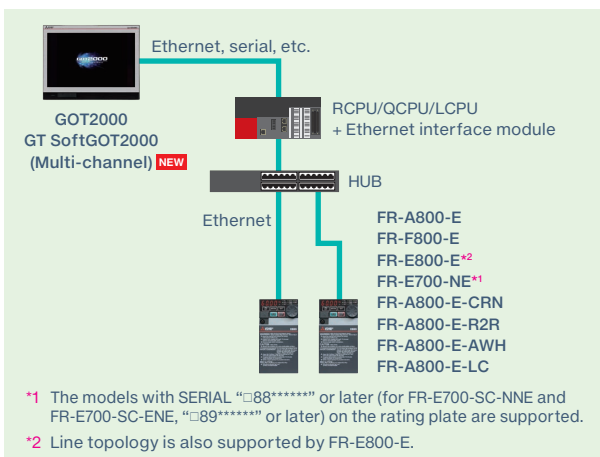
#### CASE 1 Direct connection with Ethernet



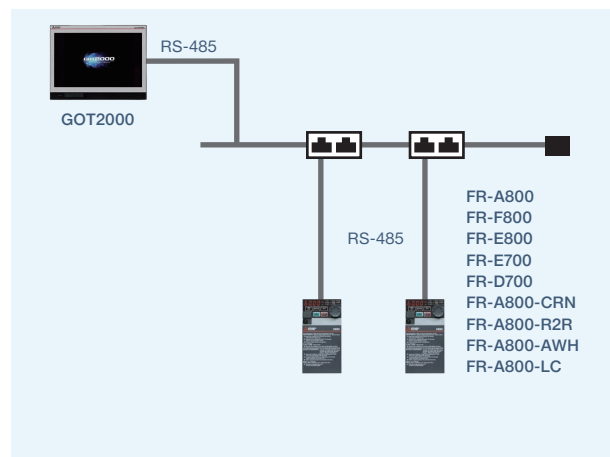
#### CASE 2 CC-Link IE connection via programmable controller



#### CASE 3 Ethernet connection via programmable controller



#### CASE 4 Direct connection with RS-485





For the details, please refer to the INVERTER FAMILY catalog (L(NA)06036).

## Drive control interactive functions and supported inverter models (GT Works3 Ver.1.240A)

○: Supported ×: Not supported △: Only monitorable parameters are supported —: Not applicable ●: Sample screen available

Function	CASE 1				CC-Link IE Field Network connection via programmable controller		CASE 2				CASE 3			
	Ethernet connection						CC-Link IE TSN connection via programmable controller <b>NEW</b>				Ethernet connection via programmable controller			
	FR-A800-E/ FR-F800-E/ FR-E800-E <b>NEW</b>		FR-E700-NE		FR-A800-GF/ FR-A800+FR-A8NCE/ FR-F800+FR-A8NCE		FR-E800-E		FR-A800-GN/ FR-A800+FR-A8NCG/ FR-F800+FR-A8NCG/		FR-A800-E/ FR-F800-E/ FR-E800-E <b>NEW</b>		FR-E700-NE	
	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>
Parameter setting (simple mode)	○	●	○	×	○	● <sup>*2</sup>	○	● <sup>*2</sup>	○	×	○	● <sup>*2</sup>	○	×
Parameter recipe (simple backup/restoration)	○	●	○	×	○	● <sup>*2</sup>	○	● <sup>*2</sup>	○	×	○	● <sup>*2</sup>	○	×
FA transparent	○	—	○	—	○ <sup>*4</sup>	—	×	—	×	—	○ <sup>*4</sup>	—	○ <sup>*4</sup>	—
Batch monitor	○	●	○	×	○	● <sup>*2</sup>	○	● <sup>*2</sup>	○	×	○	● <sup>*2</sup>	○	×
Operation command	○	●	○	×	○ <sup>*5</sup>	● <sup>*2+5</sup>	○ <sup>*5</sup>	● <sup>*2+5</sup>	○ <sup>*5</sup>	×	○	● <sup>*2</sup>	○	×
Machine diagnosis (load characteristics measurement)	○	●	×	×	○ <sup>*5</sup>	● <sup>*2+5</sup>	○ <sup>*5</sup>	● <sup>*2+5</sup>	○ <sup>*5</sup>	×	○	● <sup>*2</sup>	×	×
Inverter life diagnosis	○	●	○	×	○	● <sup>*2</sup>	○	● <sup>*2</sup>	○	×	○	● <sup>*2</sup>	○	×
Backup/restoration	×	—	×	—	○	—	×	—	×	—	×	—	×	—
Alarm display	○	●	○	×	○	● <sup>*2</sup>	○	● <sup>*2</sup>	○	×	○	● <sup>*2</sup>	○	×
Document display	○	●	○	×	○	● <sup>*2</sup>	○	● <sup>*2</sup>	○	×	○	● <sup>*2</sup>	○	×

Function	CASE 4						FR-A800 Plus Series							
	RS-485 connection						CASE 1		CASE 2		CASE 3		CASE 4	
	FR-A800/ FR-F800		FR-E800 <b>NEW</b>		FR-E700/ FR-D700		Ethernet connection		CC-Link IE Field Network connection via programmable controller		Ethernet connection via programmable controller		RS-485 connection	
	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>	Function available	Sample screen <sup>*1*</sup>
Parameter setting (simple mode)	○	●	○	● <sup>*2</sup>	○	●	○	×	○	×	○	×	○	×
Parameter recipe (simple backup/restoration)	○	×	○	● <sup>*2</sup>	○	×	○	×	○	×	○	×	○	×
FA transparent	○ <sup>*4</sup>	—	○ <sup>*4</sup>	—	○ <sup>*4</sup>	—	○	—	○ <sup>*4</sup>	—	○ <sup>*4</sup>	—	○ <sup>*4</sup>	—
Batch monitor	○	●	○	● <sup>*2</sup>	△	●	○	×	○	×	○	×	○	×
Operation command	○	●	○	● <sup>*2</sup>	○	●	○	×	○ <sup>*5</sup>	×	○	×	○	×
Machine diagnosis (load characteristics measurement)	○	×	○	● <sup>*2</sup>	×	×	○	×	○ <sup>*5</sup>	×	○	×	○	×
Inverter life diagnosis	○	●	○	● <sup>*2</sup>	△	●	○	×	○	×	○	×	○	×
Backup/restoration	×	—	×	—	×	—	×	—	×	—	×	—	×	—
Alarm display	○	●	○	● <sup>*2</sup>	△	●	○	×	○	×	○	×	○	×
Document display	○	●	○	● <sup>*2</sup>	○	●	○	×	○	×	○	×	○	×

\*1 The sample screen is the project data that is included in GT Works3 (Ver.1.235V or later). Sample screens are not supported by GT23, GT21, GS21, and SoftGOT.  
 \*2 The sample screen for CASE 1 can be used by changing the controller setting into the one for the system configuration to be used.  
 \*3 If the sample screen of the required inverter is not available, monitoring is possible by creating a project and setting the inverter parameters and devices in the numerical displays and lamps on the user's screen. For the details, please refer to page 10.  
 \*4 The function can be used when GOT and personal computer are connected with USB.  
 \*5 Settings need to be changed so that the CPU devices assigned to RY link devices can be controlled directly from GOT.  
 \*6 The sample screen monitors one specific inverter. Switching inverters by selecting a station number is not supported.

# Reasons why drive control interactive solutions are chosen

## Easy startup

✓ CASE 1 ✓ CASE 2 ✓ CASE 3 ✓ CASE 4

GT27 GT25 GT23\*3 GT21\*3 GS21\*3 SoftGOT\*3

### Challenge

We want to efficiently start up the system!



Programming and settings are a hassle...

**GOT Drive** solves your problems

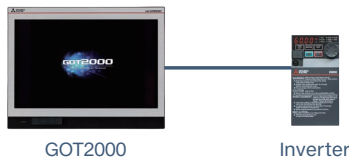
### Three-step simple startup

There are various sample screens that can be used with the GOT2000 for inverter parameter setting, batch monitoring, and machine diagnosis (load characteristics measurement), etc. Use the sample screens for easy system startup.

#### STEP 1 >>>

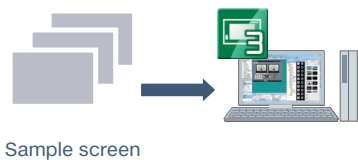
Select and connect the GOT and inverter.

Connect with your preferred connection type



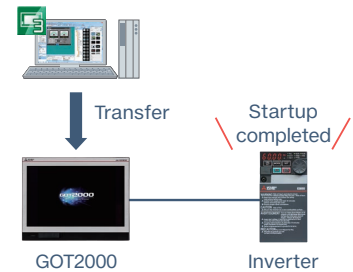
#### STEP 2 >>>

Sample screens<sup>\*1</sup> matching the connection type can be used for the user's project data.



#### STEP 3 >>>

Transfer the project data to the GOT.



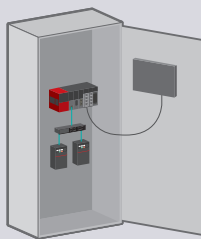
## Parameter settings (simple mode)

✓ CASE 1 ✓ CASE 2 ✓ CASE 3 ✓ CASE 4

GT27 GT25 GT23\*3 GT21\*3 GS21\*3 SoftGOT\*3

### Challenge

We want to set the parameters without opening the control panel!



Opening and closing the control panel is a hassle...

**GOT Drive** solves your problems

### Easily adjust parameters with the GOT

Use the GOT on the front of the control panel to adjust the inverter's simple mode parameters. The parameter names can be confirmed on a list, so the required parameters can be easily found and set.



Back up (save) or restore (write) parameters as a recipe file when necessary. For the details, please refer to "Parameter recipe" on page 5

Parameter Setting screen<sup>\*2</sup>

\*1 Sample screens are included with GT Works3 (Ver.1.235V or later). For the details, please contact your local sales office.

\*2 Sample screens (VGA) are available. The screen image is the sample screen of FR-A800-E for CASE 1. The screen image differs from the one for FR-E800 and CASE 4.

\*3 Sample screens are not supported by GT23, GT21, GS21, and SoftGOT.

## Parameter recipe (simple backup/restoration)

✓ CASE 1 ✓ CASE 2 ✓ CASE 3 ✓ CASE 4

GT27 GT25 GT23\*2 GT21\*2 GS21\*2 SoftGOT\*2

### Challenge

We want to return the parameters to the pre-adjustment values!



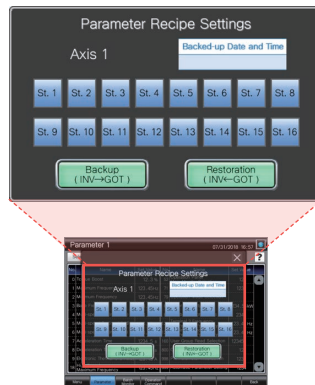
Parameter Setting screen

What were the pre-adjustment parameter values...

**GOT Drive** solves your problems

## Back up/restore the pre-adjustment parameters with the GOT

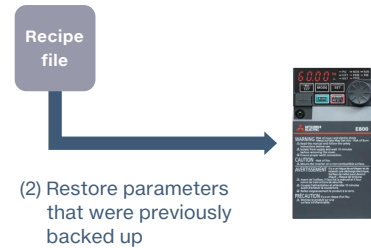
The current inverter parameters can be backed up (saved) as a recipe file using the GOT. To return the parameters to the pre-adjustment state while starting up and adjusting the inverter, just restore (write) the parameters that were previously backed up (saved).



Parameter Setting screen\*1

▶ How to return parameters to pre-adjustment values

(1) Back up the current parameters as a recipe file before adjustment



(2) Restore parameters that were previously backed up

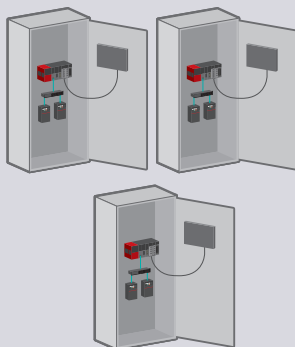
## FA transparent

✓ CASE 1 ✓ CASE 2 ✓ CASE 3 ✓ CASE 4

GT27 GT25 GT23 GT21 GS21 SoftGOT

### Challenge

We want to perform debugging smoothly!

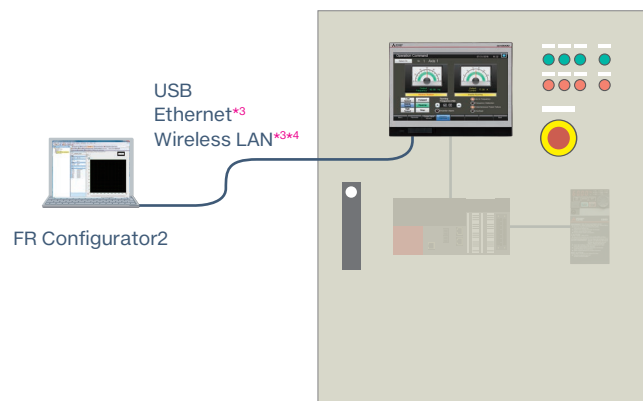


Because there are so many control panels, opening, closing or adjusting them is a hassle...

**GOT Drive** solves your problems

## Debugging via GOT without opening the control panel

By connecting a personal computer with the GOT's USB interface, the inverter can be programmed, started up, and adjusted via GOT. There is no need to open the control panel and change the cable.



\*1 Sample screens (VGA) are available. The screen image is the sample screen of FR-A800-E for CASE 1. The screen image differs from the one for FR-E800. The sample screen of this function is not available for FR-E700/FR-D700 in CASE 4.

\*2 Sample screens are not supported by GT23, GT21, GS21, and SoftGOT.

\*3 Not supported by CASE 4.

\*4 The wireless LAN communication unit (GT25-WLAN) needs to be installed on GOT. The unit cannot be used with GT2505, GT25 handy, GT23, and GT21 models. For the countries where the unit can be used and other details, please refer to the Graphic Operation Terminal GOT2000 Series catalog.

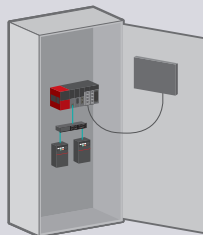
## Batch monitor

✓ CASE 1 ✓ CASE 2 ✓ CASE 3 ✓ CASE 4\*1

GT27 GT25 GT23\*3 GT21\*3 GS21\*3 SoftGOT\*3

### Challenge

We want to monitor the inverter status without opening the control panel!



Opening and closing the control panel is a hassle...

**GOT Drive** solves your problems

## Perform batch monitor of the inverter with the GOT

The inverter's current values such as the output frequency, output current, and output voltage can be monitored with the GOT without preparing the personal computer or directly confirming the inverter.

No.	Name	Present Value	No.	Name	Present Value
1	Output Frequency	123.45 Hz	11	Converter Output Voltage Peak Value	1234.5 V
2	Output Current	1234.56 A	12	Input Power	1234.56 kW
3	Output Voltage	1234.5 V	13	Output Power	1234.56 kW
4	Frequency Setting Value	123.45 Hz	14	Load Meter	123.4 %
5	Speed/Machine Speed	12345 r/min	15	Motor Excitation Current	1234.56 A
6	Motor Torque	123.4 %	16	Position Pulse	12345
7	Converter Output Voltage	1234.5 V	17	Cumulative Energization Time	12345 h
8	Regenerative Brake Duty	123.4 %	18	Orientation Status	12
9	Electronic Thermal O/L Relay Load Factor	123.4 %	19	Actual Operation Time	12345 h
10	Output Current Peak Value	1234.56 A	20	Motor Load Factor	123.4 %

Batch Monitor screen\*2

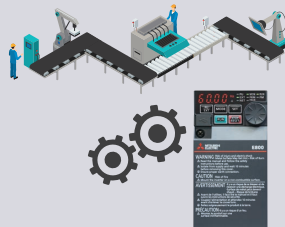
## Operation command

✓ CASE 1 ✓ CASE 2 ✓ CASE 3 ✓ CASE 4

GT27 GT25 GT23\*3 GT21\*3 GS21\*3 SoftGOT\*3

### Challenge

We want to start up the system while confirming the inverter's operation!



If only there was a way to easily test the inverter operation...

**GOT Drive** solves your problems

## Issue operation commands to the inverter from the GOT

The inverter operation commands can be issued from the GOT. Since the system operation can be confirmed while monitoring the inverter's output frequency and output current values, the startup work efficiency can be increased.



Operation Command screen\*2

\*1 Only monitorable parameters are supported for FR-E700 and FR-D700.

\*2 Sample screens (VGA) are available. The screen image is the sample screen of FR-A800-E for CASE 1. The screen image differs from the one for FR-E800 and CASE 4.

\*3 Sample screens are not supported by GT23, GT21, GS21, and SoftGOT.

## Machine diagnosis (load characteristics measurement)

✓ CASE 1\*1 ✓ CASE 2 ✓ CASE 3\*1 ✓ CASE 4\*1

GT27 GT25 GT23\*3 GT21\*3 GS21\*3 SoftGOT\*3

### Challenge

We want to detect clogged filters and clogged pipes!



What is the cause of the system error...

**GOT Drive** solves your problems

## Detect system errors with the inverter, and display them on the GOT

The relation of output frequency and torque in the normal state can be saved in the inverter, and used to check whether the operation is taking place with a normal load. If the result is out of the normal range, an error or warning is output so that it is useful to detect system errors and perform maintenance work.

### STEP 1 >>>

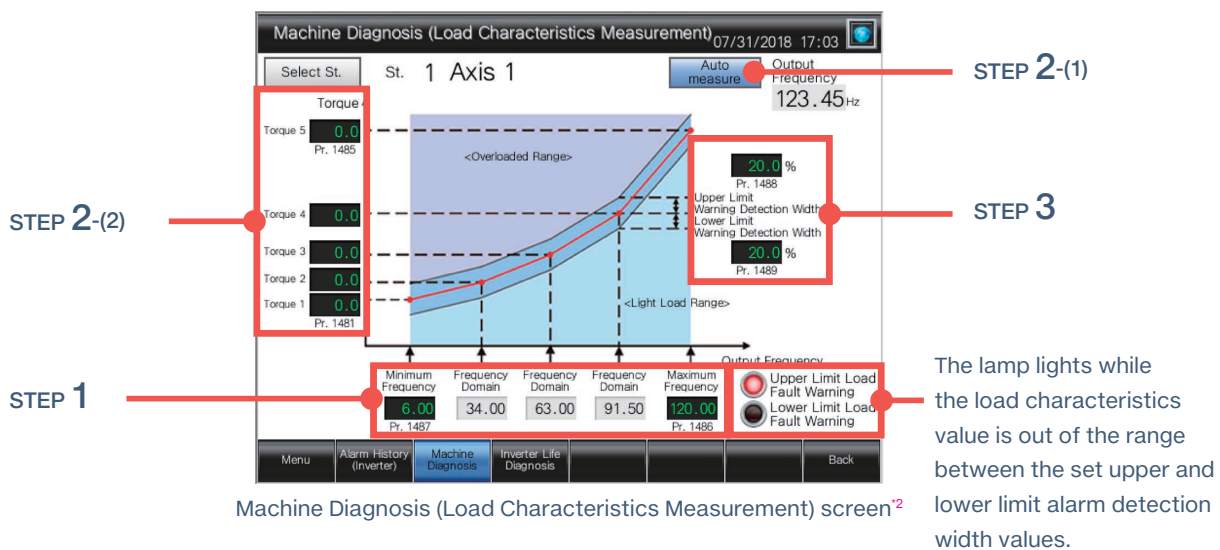
Set/display the range of frequency to detect load characteristics error.

### STEP 2 >>>

- (1) The inverter automatically measures the relation of the output frequency and torque in the normal state, and calculates the load characteristics reference value.
- (2) The load characteristics reference value calculated in the above (1) is displayed. To finely adjust this value, change the value manually.

### STEP 3 >>>

Set the upper and lower limit warning detection width (threshold value) against the load characteristics reference value. The initial value is 20%.



Machine Diagnosis (Load Characteristics Measurement) screen\*2

#### <Possible error causes>

- In overload range: clogged filter, clogged pipe, etc.
- In light load range: broken belt, broken blade, idle run, etc.

\*1 FR-E700-NE, FR-E700, and FR-D700 are not supported by machine diagnosis (load characteristics measurement).

\*2 Sample screens (VGA) are available. The screen image is the sample screen of FR-A800-E for CASE 1. The screen image differs from the one for FR-E800. The sample screen of this function is not available for FR-E700/FR-D700 in CASE 4.

\*3 Sample screens are not supported by GT23, GT21, GS21, and SoftGOT.

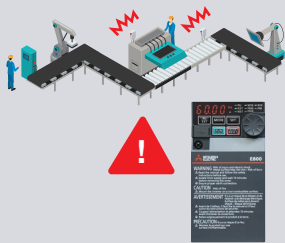
## Inverter life diagnosis

✓ CASE 1 ✓ CASE 2 ✓ CASE 3 ✓ CASE 4\*1

GT27 GT25 GT23\*3 GT21\*3 GS21\*3 SoftGOT\*3

### Challenge

We want to know the inverter replacement timing!

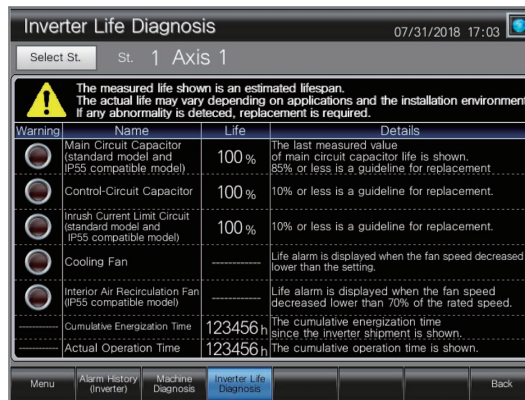


The inverter has failed...

**GOT Drive** solves your problems

## Replacement timing of inverter components can be displayed on the GOT

GOT can be used to monitor the operation status of the inverter's components (main circuit capacitor, control circuit capacitor, cooling fan, etc.) and confirm the replacement timing. Perform predictive maintenance by replacing parts before the inverter fails.



Inverter Life Diagnosis screen\*2

2

3

Maintenance

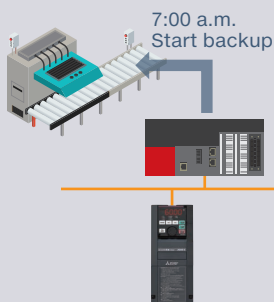
## Backup/restoration

□ CASE 1 ✓ CASE 2\*4 □ CASE 3 □ CASE 4

GT27 GT25 GT23 GT21 GS21 SoftGOT

### Challenge

We want to periodically back up the inverter parameters!



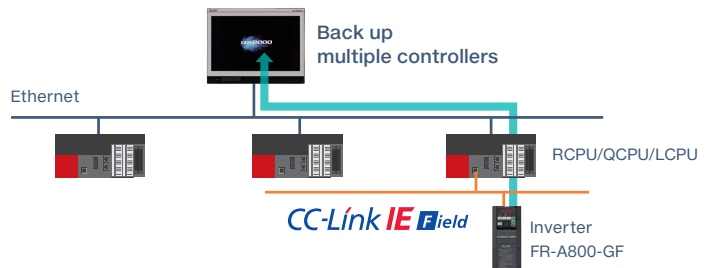
If only parameters can be automatically backed up periodically...

**GOT Drive** solves your problems

## Automatically back up the inverter parameters with the GOT

In addition to the parameters, sequence programs for the inverter can be backed up and restored to or from the GOT's SD memory card or USB memory. The inverter can be replaced and restored with just the GOT without a personal computer. You can specify a trigger device, a day of the week, and time for automatic backup. The function makes it easier to backup data at the end of the day, before the weekend, or before the holiday.

### System configuration compatible with the backup/restoration function



This function cannot be used when using the CC-Link IE Field Network Ethernet adapter unit.

\*1 Only monitorable parameters are supported for FR-E700 and FR-D700.

\*2 Sample screens (VGA) are available. The screen image is the sample screen of FR-A800-E for CASE 1. The screen image differs from the one for FR-E800 and CASE 4.

\*3 Sample screens are not supported by GT23, GT21, GS21, and SoftGOT.

\*4 Supported when a programmable controller and inverters are connected via CC-Link IE Field Network in CASE 2.



## Alarm display

✓ CASE 1 ✓ CASE 2 ✓ CASE 3 ✓ CASE 4\*1

GT27 GT25 GT23\*3 GT21\*3 GS21\*3 SoftGOT\*3

### Challenge

We want to easily confirm the details of current alarms!



What are the details of the inverter error codes...

**GOT Drive** solves your problems

## Display details of the inverter alarms on the GOT

The error codes and details of alarms occurring in the inverter can be confirmed with the GOT. If a problem occurs, you can quickly identify the problem cause and reduce downtime.

Alarm History (Inverter) 07/31/2018 17:05

Select St. St. 1 Axis 1

Current Fault: E.OC1 Overcurrent Trip During Acceleration

	Symbol	Name	Output Frequency	Output Current	Output Voltage	Power-on Time	Occurred At
Latest	E.OC1	Operation Panel Power Supply Short Circuit (FR-E70 Terminal Power Supply Short Circuit)	123.45Hz	123.45A	1234.5V	123456h	1234/12/12 12:12:00
2nd	E.OC1	Overcurrent Trip During Acceleration	123.45Hz	123.45A	1234.5V	123456h	1234/12/12 12:12:00
3rd	E.OC1	Overcurrent Trip During Acceleration	123.45Hz	123.45A	1234.5V	123456h	1234/12/12 12:12:00
4th	E.OC1	Overcurrent Trip During Acceleration	123.45Hz	123.45A	1234.5V	123456h	1234/12/12 12:12:00
5th	E.OC1	Overcurrent Trip During Acceleration	123.45Hz	123.45A	1234.5V	123456h	1234/12/12 12:12:00
6th	E.OC1	Overcurrent Trip During Acceleration	123.45Hz	123.45A	1234.5V	123456h	1234/12/12 12:12:00
7th	E.OC1	Overcurrent Trip During Acceleration	123.45Hz	123.45A	1234.5V	123456h	1234/12/12 12:12:00
8th	E.OC1	Overcurrent Trip During Acceleration	123.45Hz	123.45A	1234.5V	123456h	1234/12/12 12:12:00

Inverter Reset Alarm All Clear \*Reset/Clear can be performed with a 3-second long press. Inverter Alarm

Menu Alarm History (Inverter) Machine Diagnosis Inverter Life Diagnosis Back

Alarm History (Inverter) screen\*2

## Document display

✓ CASE 1 ✓ CASE 2 ✓ CASE 3 ✓ CASE 4

GT27 GT25 GT23 GT21 GS21 SoftGOT\*3

### Challenge

We want to confirm the actions for current alarms!



How can we handle the alarms...

**GOT Drive** solves your problems

## Display the inverter manual on the GOT

Manuals can be displayed on the GOT. When an alarm occurs, corrective actions can be taken while checking the recovery methods in the troubleshooting manual. Therefore, the system can be restored quickly without relying on operator experience.

Manual Display 07/31/2018 17:05

6.4 List of fault displays

If the displayed message does not correspond to any of the following or if you have any other problem, contact your sales representative.

◆ Error message

- A message reporting operational fault and setting fault to the operation panel and the parameter set is displayed. The inverter output is not shut off.

Operation panel indication	Name	Value	Unit	Initial Value
E.OC1	Operation panel lock	0	bit	0
E.P1	Parameter locked	0	bit	0
E.P4	Parameter with error	143	hex	0
E.P8	Copy operation fault	143	hex	0
E.E4	Copy operation fault	143	hex	0
E.E8	Copy operation fault	143	hex	0
E.Er	Error	0	bit	0

◆ Warning

- The inverter output is not shut off when a warning is displayed. Inverter's return to be appropriate measures.

Operation panel indication	Name	Value	Unit	Initial Value
E.W1	Warning for starting	0	bit	0

◆ Alarm

- The inverter output is not shut off. An Alarm (ALF) signal can also be output with a parameter setting.

Operation panel indication	Name	Value	Unit	Initial Value
HP2	Phase position error (overrange)	0	bit	0
HP3	Phase position error (parameter)	0	bit	0
CF	Controlled operation timing	0	bit	0
LF	Load loss warning	0	bit	0

◆ Fault

- When a protective function is activated, the inverter output is shut off and a fault (ALF) signal is output.
- The data code is used for checking the fault detail via communication or with the BOP fault indication.

◆ Data code 16 to 199

Operation panel indication	Name	Value	Unit	Initial Value
E.OC1	Overcurrent for starting	0	bit	0

Menu Startup Operation Maintenance Manual Display Back

Manual Display screen\*2

\*1 Only monitorable parameters are supported for FR-E700 and FR-D700.

\*2 Sample screens (VGA) are available. The screen image is the sample screen of FR-A800-E for CASE 1. The screen image differs from the one for FR-E800 and CASE 4.

\*3 Sample screens are not supported by GT23, GT21, GS21, and SoftGOT.

## Sample screen

- GT27
- GT25
- GT23
- GT21
- GS21
- SoftGOT

### Challenge

We want to create screens easily!



It's a hassle to create screens from scratch...

## MELSOFT GT Works3 solves your problems

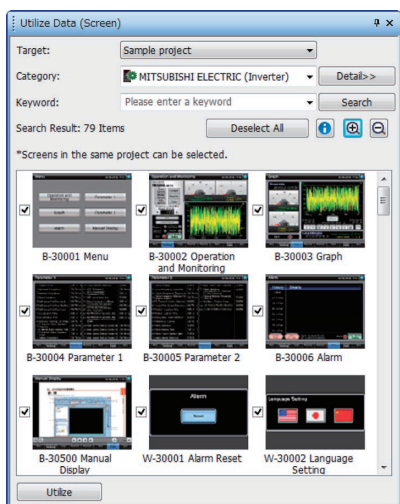
### Support screen creation with sample screens

GOT2000 has sample screens that can be used to set the inverter parameters and perform machine diagnosis (load characteristics measurement). Sample screens can be used by choosing the project or by choosing individual screens. The sample screens are included in GT Works3 (Ver.1.235V or later).

4

Screen creation

To reuse individual screens, select [Screen] → [Utilize Data] from the GT Works3 menu.



#### Screen specifications

GOT type: GT27\*\*~V (640x480)

\* The GOT type can be changed, and used for a GOT with different resolution. GT23, GT21, GS21, and SoftGOT are not supported.

#### Compatible languages

Japanese, English, Chinese (Simplified Chinese)

#### How to obtain the latest sample screens

For how to obtain the latest sample screens, please contact your local sales office.

## Easy-to-use screen design software

- GT27
- GT25
- GT23
- GT21
- GS21
- SoftGOT

### Challenge

We want to freely create screens!

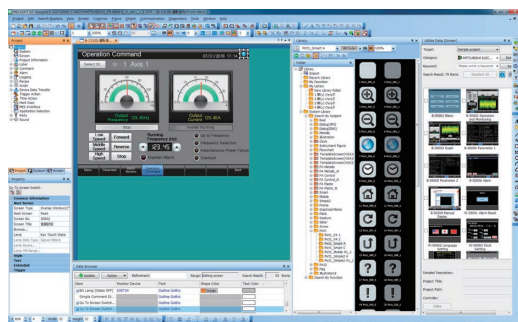


Necessary items are not provided in the sample screens...

## MELSOFT GT Works3 solves your problems

### Freely create monitor screens

The sample screens can be customized and the data to be displayed can be freely set on the user-created screen. If there is no sample screen for the inverter you wish to use, or if you want to monitor the inverter with GT23, GT21, GS21, or SoftGOT, monitoring is possible by creating an original project, and setting the inverter parameters and devices in the numerical displays and lamps.



Freely create screens with GT Works3



Sample screens (VGA) customized for wide screens (WVGA)

## The Mitsubishi Electric Graphic Operation Terminal GOT2000 Series continues to impress with solutions that fulfill all demands

# GOT2000



The GOT2000 boasts advanced functionality, acts as a seamless gateway to other industrial automation devices, all while increasing productivity and efficiency. The high quality display is designed to optimize operator control and monitoring of device and line statuses. If you are looking for an intuitive operation terminal, the new tablet-like operability and the higher functionality of operation terminal makes the GOT2000 the ideal choice.

For the details about the GOT2000 Series, please refer to the Graphic Operation Terminal GOT2000 Series catalog (L(NA)08270ENG).

## Design future manufacturing Mitsubishi Electric Inverter FR-E800

# FR-E800



Mitsubishi Electric FR-E800 inverters support various networks such as CC-Link IE TSN, a next-generation open industrial network, and make manufacturing smarter in various fields by integrating the world's first\*1 Corrosive-Attack-Level Alert System\*2 and the industry's first\*1 AI-based diagnostic functions.

\*1 According to our investigation as of September 10, 2019.

\*2 Patent applied.

For the details about FR-E800, please refer to the INVERTER FR-E800 catalog (L(NA)06131ENG).

### How to read marks of supported system configurations and GOT models

■ System configurations with ✓ are supported.

✓ CASE 1 ✓ CASE 2 ✓ CASE 3 ✓ CASE 4

■ The indicated GOTs are supported.

GT27 GT25 GT23 GT21 GS21 SoftGOT

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

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 before use

This publication explains the typical features and functions of the products herein and does not provide restrictions or other information related to usage and module combinations. Before using the products, always read the product user manuals. Mitsubishi Electric will not be held liable for damage caused by factors found not to be the cause of Mitsubishi Electric; opportunity loss or lost profits caused by faults in Mitsubishi Electric products; damage, secondary damage, or accident compensation, whether foreseeable or not, caused by special factors; damage to products other than Mitsubishi Electric products; or any other duties.

#### ⚠ For safe use

- To use the products given in this publication properly, always read the relevant manuals before beginning operation.
- The products have been manufactured as general-purpose parts for general industries, and are not designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the products for special purposes such as nuclear power, electric power, aerospace, medicine or passenger-carrying vehicles, consult with Mitsubishi Electric.
- The products have been manufactured under strict quality control. However, when installing the products where major accidents or losses could occur if the products fail, install appropriate backup or fail-safe functions in the system.

# Global Partner. Local Friend.

## American Offices

<b>USA</b> <b>Mitsubishi Electric Automation, Inc.</b> 500 Corporate Woods Parkway, Vernon Hills, IL 60061, U.S.A. Tel: +1-847-478-2100	<b>Mexico</b> <b>Mitsubishi Electric Automation, Inc.</b> <b>Mexico Branch</b> Boulevard Miguel de Cervantes Saavedra 301, Torre Norte Piso 5, Ampliacion Granada, Miguel Hidalgo, Ciudad de Mexico, Mexico, C.P.11520 Tel: +52-55-3067-7512	<b>Brazil</b> <b>Mitsubishi Electric do Brasil Comercio e Servicos Ltda.</b> Avenida Adelino Cardana, 293, 21 andar, Bethaville, Barueri SP, Brazil Tel: +55-11-4689-3000
--	---	--

## Asia-Pacific Offices

<b>China</b> <b>Mitsubishi Electric Automation (China) Ltd.</b> Mitsubishi Electric Automation Center, No.1386 Hongqiao Road, Shanghai, China Tel: +86-21-2322-3030	<b>Taiwan</b> <b>SETSUYO ENTERPRISE CO., LTD.</b> 6F, No.105, Wugong 3rd Road, Wugu District, New Taipei City 24889, Taiwan Tel: +886-2-2299-2499	<b>Korea</b> <b>Mitsubishi Electric Automation Korea Co., Ltd.</b> 7F to 9F, Gangseo Hangang Xi-tower A, 401, Yangcheon-ro, Gangseo-Gu, Seoul 07528, Korea Tel: +82-2-3660-9569
<b>Singapore</b> <b>Mitsubishi Electric Asia Pte. Ltd.</b> 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Tel: +65-6473-2308	<b>Thailand</b> <b>Mitsubishi Electric Factory Automation (Thailand) Co., Ltd.</b> 101, True Digital Park Office, 5th Floor, Sukhumvit Road, Bangchak, Phra Khanong, Bangkok 10260, Thailand Tel: +66-2092-8600	<b>Indonesia</b> <b>PT. Mitsubishi Electric Indonesia</b> Gedung Jaya 8th Floor, J.L. MH. Thamrin No.12, Jakarta Pusat 10340, Indonesia Tel: +62-21-3192-6461
<b>Vietnam</b> <b>Mitsubishi Electric Vietnam Co., Ltd.</b> Unit 01-04, 10th Floor, Vincorm Center, 72 Le Thanh Ton Street, District 1, Ho Chi Minh City, Vietnam Tel: +84-28-3910-5945	<b>India</b> <b>Mitsubishi Electric India Pvt. Ltd.</b> <b>Pune Branch</b> Emerald House, EL-3, J Block, M.I.D.C., Bhosari, Pune - 411026, Maharashtra, India Tel: +91-20-2710-2000	<b>Australia</b> <b>Mitsubishi Electric Australia Pty. Ltd.</b> 348 Victoria Road, P.O. Box 11, Rydalmere, N.S.W. 2116, Australia Tel: +61-2-9684-7777

## European Offices

<b>Germany</b> <b>Mitsubishi Electric Europe B.V.</b> <b>German Branch</b> Mitsubishi-Electric-Platz 1, 40882 Ratingen, Germany Tel: +49-2102-486-0	<b>UK</b> <b>Mitsubishi Electric Europe B.V.</b> <b>UK Branch</b> Travellers Lane, UK-Hatfield, Hertfordshire, AL10 8XB, U.K. Tel: +44-1707-28-8780	<b>Italy</b> <b>Mitsubishi Electric Europe B.V.</b> <b>Italian Branch</b> Centro Direzionale Colleoni - Palazzo Sirio, Viale Colleoni 7, 20864 Agrate Brianza (MB), Italy Tel: +39-039-60531
<b>Spain</b> <b>Mitsubishi Electric Europe B.V.</b> <b>Spanish Branch</b> Carretera de Rubi 76-80-Apdo. 420, E-08190 Sant Cugat del Valles (Barcelona), Spain Tel: +34-935-65-3131	<b>France</b> <b>Mitsubishi Electric Europe B.V.</b> <b>French Branch</b> 25, Boulevard des Bouvets, 92741 Nanterre Cedex, France Tel: +33-1-55-68-55-68	<b>Czech</b> <b>Mitsubishi Electric Europe B.V.</b> <b>Czech Branch</b> Pekarska 621/7, 155 00 Praha 5, Czech Republic Tel: +420-255-719-200
<b>Turkey</b> <b>Mitsubishi Electric Turkey A.S.</b> <b>Umraniye Branch</b> Serifali Mahallesi Nutuk Sokak No:5, TR-34775 Umraniye / Istanbul, Turkey Tel: +90-216-526-3990	<b>Poland</b> <b>Mitsubishi Electric Europe B.V.</b> <b>Polish Branch</b> ul. Krakowska 48, 32-083 Balice, Poland Tel: +48-12-347-65-00	<b>Russia</b> <b>Mitsubishi Electric (Russia) LLC</b> <b>St. Petersburg Branch</b> Piskarevsky pr. 2, bld 2, lit "Sch", BC "Benua", office 720; 195027 St. Petersburg, Russia Tel: +7-812-633-3497
<b>South Africa</b> <b>Adroit Technologies</b> 20 Waterford Office Park, 189 Witkoppen Road, Fourways, South Africa Tel: +27-11-658-8100		

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

## 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