

GOT Drive



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Factory Automation

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Realizing central monitoring, speed up system startup,
improve predictive maintenance and troubleshooting

TRENDS IN AUTOMATION 2021

Advances in technology are changing the way nearly every industry operates. As manufacturers look to stay competitive in the marketplace, they are constantly searching for the latest and greatest inventions, strategies, and systems. As you research what's next for your facility, you might want to consider the following trends that we think are influencing manufacturing.

- // Industrial Internet of Things (IIoT)
- // Accessible information on all levels (Information and operations technology)
- // Cloud solutions
- // (Cyber) security
- // Predictive and preventive maintenance
- // Better troubleshooting and diagnostics
- // Mobile solutions
- // Plug & Play
- // ...

Another interesting piece of the IIoT story right now are motor drives, (Variable frequency drives VFD). VFD's control electric motors which, despite being a relatively simple piece of technology, are amongst the most critical pieces of equipment in any factory ... without them, nothing moves.

More users are now placing sensors and measurement devices in and around industrial motors to allow monitoring of status information for predictive and preventive maintenance. This points to a future where advanced software algorithms can predict motor failure before it happens.



ACCESSIBLE INFORMATION ON ALL LEVELS

Does the production stop if your MES system fails, or does it stop when your drive system (inverter, servo, robot) fails?

// What is the status of the drive system?

// What is the status of the mechanics?

// Additional sensors for analysis:

- Bearings
- Misalignment
- Imbalance
- Cavitation
- Lack of lubricant
- Temperature
- ...



AGENDA

- // What are GOT Drive Solutions?
- // GOT2000 Human Machine Interface
- // GOT Drive Inverter
- // GOT Drive Servo
- // GOT Drive Robot

WHAT ARE GOT DRIVE SOLUTIONS?

The GOT2000 series provide solutions to meet various types of application requirements. Integrating the functionality of HMI panels and drive control systems creates many useful functionalities. 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.

GOT2000 provides advanced functionality and improves connectivity with Mitsubishi Electric drive systems. Challenges that cannot be resolved just with inverter, servo or robot can now be resolved with GOT2000 and GOT drive functions.

GOT Drive Solutions for:

- // Inverters
- // Servo systems
- // Industrial Robots



GOT2000 HUMAN MACHINE INTERFACE

// Large variety of choice

- Standard
- Simple
- Wide Screen
- Rugged
- Open Frame
- Hand Held
- Soft GOT

// Screen size from 3,8" till 15"

// Communication Serial, Ethernet, CC-Link IE (TSN), Bus

// Many solutions as standard available

[Catalog GOT2000](#)



GT SOFTGOT2000

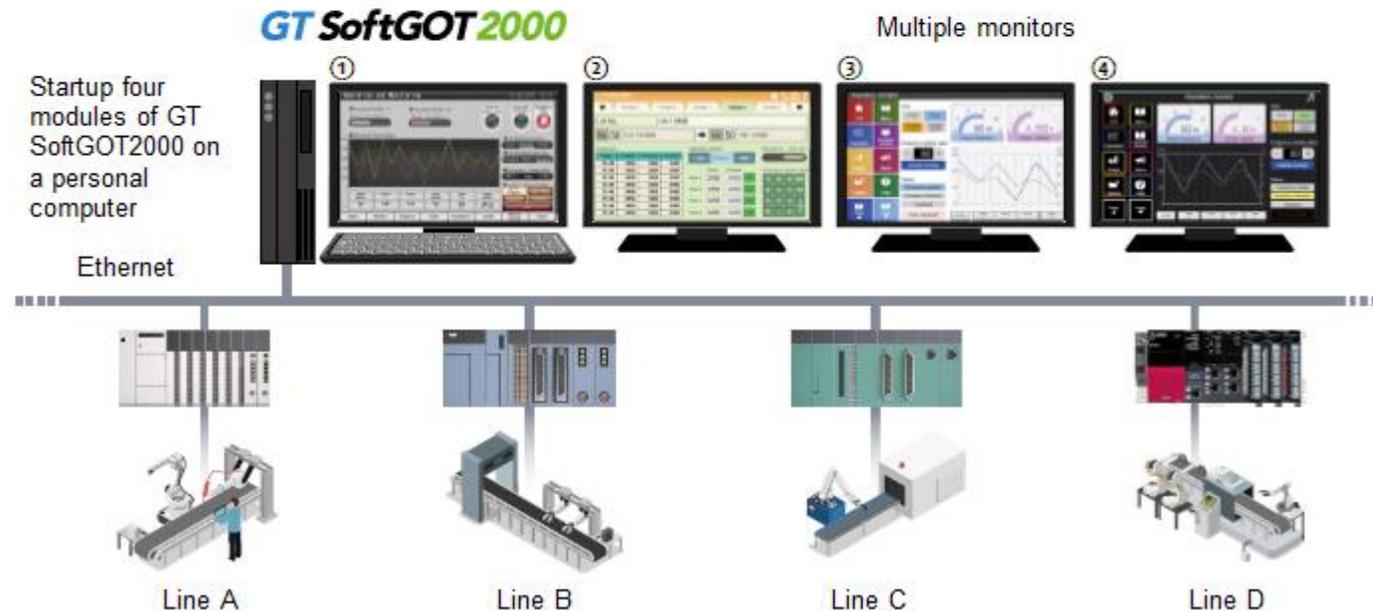
Turn your personal computer or panel computer into GOT2000

// GT SoftGOT2000 is the HMI software that runs on personal computers and panel computers. It can be used to monitor and operate the information of industrial devices that are connected to a personal computer or a panel computer via a network.

- // Easy connection between a personal computer and industrial devices at the shop floor
- // Collectively monitoring programmable controllers of different manufacturers
- // Collectively monitor multiple lines from an office



Large displays on factory floor



GOT2000 SOLUTIONS

GOT Smart Web-based Remote Solutions

GOT Mobile function

iQ Monozukuri Process Remote Monitoring

SoftGOT GOT link function

iQ Monozukuri ANDON

VNC server function

Remote personal computer operation function (Ethernet)

GOT Easy Drive Control (Inverter) Interactive Solutions

Parameter settings (simple mode)

Operation command

Alarm display

Parameter recipe (Backup / restoration)

Machine diagnosis (load characteristics measurement)

Document display

Batch monitor

Inverter life diagnosis

FA transparent

GOT Easy Drive Control (Servo) Interactive Solutions

Drive recorder function

System launcher (servo network) function

R motion monitor function / Q motion monitor function

Servo amplifier graph function

Power monitor

Motion SFC monitor function

Machine diagnosis function

Alarm display function

Motion program editor function

Servo amplifier life diagnosis function

Servo amplifier monitor function

GOT Drive Plus (paid template screens)

One-touch tuning function / Tuning function

Intelligent module monitor function

GOT Easy Drive Control (Robot) Interactive Solutions

Interactive functions to support startup and maintenance

Backup / restore

Robot status monitoring function

Logging & Graphs list

Recipe function

FA transparent

Sophisticated Programmable Controller Interactive Features

Sequence program monitor (SFC) function

FX list editor function & FX ladder monitor function

Log viewer function

Sequence program monitor (Ladder)

Sequence program monitor (iQ-R ladder) function

GOT2000 SOLUTIONS

Maintenance, Troubleshooting and Diagnostics Features

Backup / Restoration function

System launcher function

CC-Link IE Field Network diagnostics

FA transparent function

Device monitor function

Network monitor function

Alarm function

Document display function

GOT diagnostics function

Hardware Features

Compatible with environmental standards

Wireless LAN communication unit

Ethernet communication unit

Sound output function

Multimedia function

Video display / RGB display / Video output function

Security & Additional System Features

Recipe function and display (record list)

Writing resource data

Various security functions

Operation log function

Operator authentication function

Network drive

Printing hard copies and reports

Base screen size expansion

Changing comments without using GT Designer3

Regarding FDA 21 CFR Part 11 support

Logging & Graph / List

Gesture function

Data Handling Features

MES interface function

File manager function

File transfer function

Interactive Features with Other Industrial Devices

Multi-channel function / Device data transfer function

Interaction function with CNC's

iQSS utility function

e-F@ctory Starter Package (free of charge sample project)

Standard screen samples, Function samples

Connection samples, iQSS related samples

GOT Easy Drive Control (Inverter) Interactive Solutions



MITSUBISHI GRAPHIC OPERATION TERMINAL

GOT2000 + INVERTER

GOT Drive

GOT DRIVE INVERTER

GOT Drive provides solutions to solve issues by enhancing connectivity between GOT2000 and inverters.

Previously

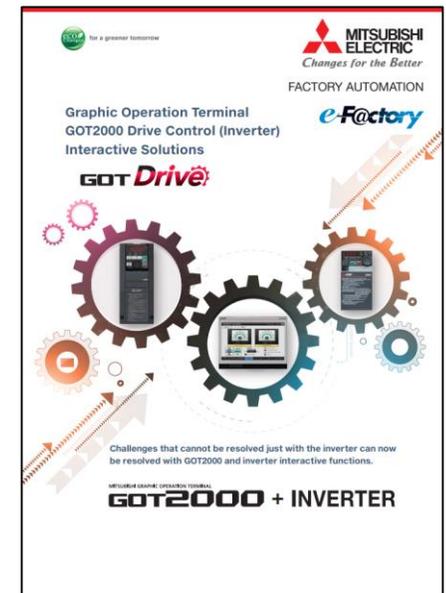
- // Setup, adjustment, and diagnosis of drive controllers using tools on operation panels or personal computers
- // Workload of setup, adjustment, and diagnosis was increased due to complicated system

With GOT Drive Inverter

- // Realizes some functions of FR Configurator2 (set up, adjust, and diagnosis) on the GOT
- // Takes advantages of GOT features
 1. Continuous controller monitoring
 2. Wide expressions of display
 3. Alarm notification function

- // Increases efficiency in startup/adjustment work by intensive monitoring of inverters
- // Visualization, diagnosis, maintenance of equipment on one GOT

// [GOT Drive Inverter website](#) / [GOT2000 Drive \(Inverter\) catalog](#)

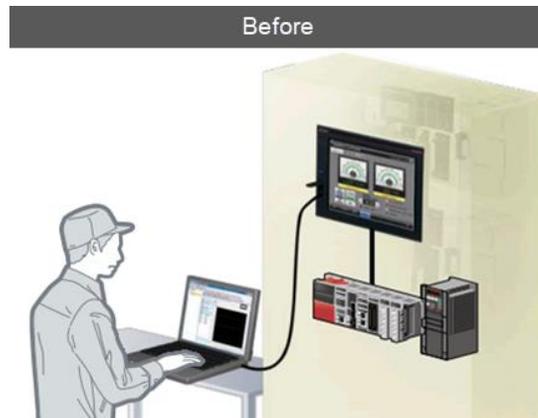


GOT DRIVE INVERTER BENEFITS

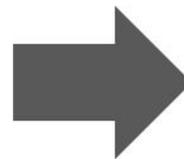
	Benefits for users	Benefits for OEM / SI
Design	Easy to add to existing equipment (no need to change ladder/sequence devices)	Workload in screen design is reduced by utilizing sample screens
Startup, adjustment		Efficiency in startup/adjustment work is increased by intensive monitoring
Operation	Visualization of operation status	
Maintenance	<ul style="list-style-type: none"> No need for a laptop or PC Error check and troubleshooting without manuals Primary investigation at worksite Preventive/predictive maintenance of the whole system (not only the device) 	<ul style="list-style-type: none"> Workload in customer support is reduced (Primary diagnosis by an end user, easy to get detailed diagnosis data) Added value of equipment is increased according to large benefits for end users (especially maintenance equipment)

Benefits mainly in maintenance system

Large benefits not only in design/startup, but also in maintenance system



It takes lots of time to setup every single piece of equipment

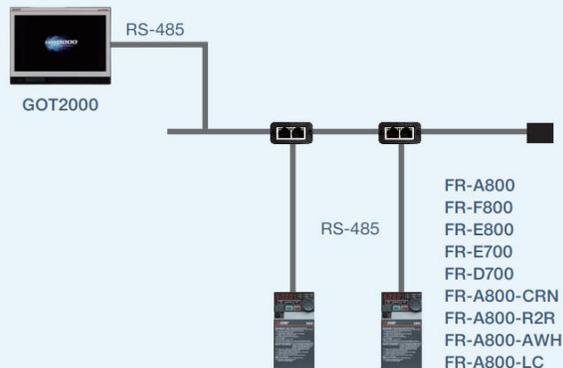


Startup, adjustment, maintenance, all work can be done by just one GOT!

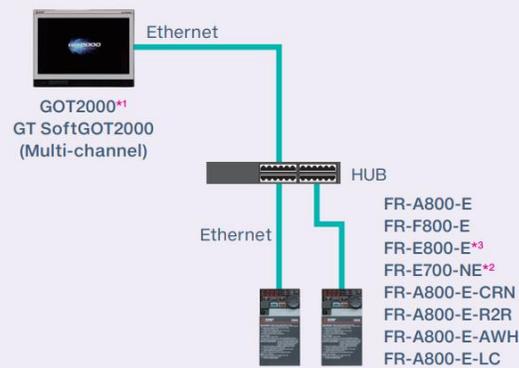
GOT DRIVE INVERTER SYSTEM CONFIGURATIONS

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 RS-485



CASE 2 Direct connection with Ethernet

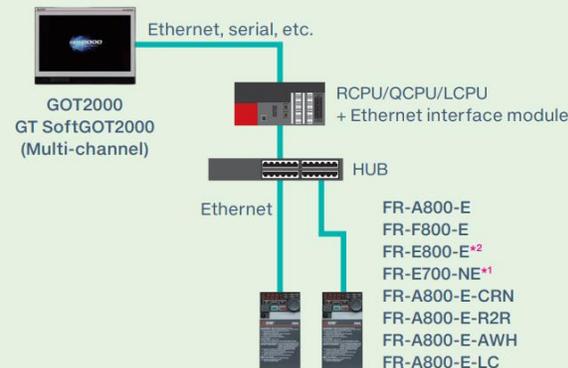


*1 The models with an Ethernet port are supported among GT21 models.

*2 The models with SERIAL "□88*****" or later on the rating plate are supported.

*3 Line topology is also supported by FR-E800-E.

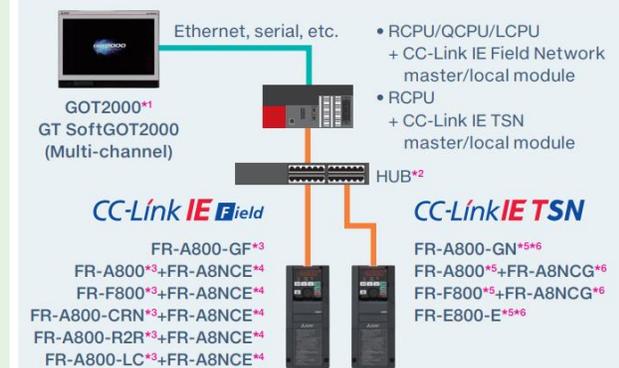
CASE 3 Ethernet connection via programmable controller



*1 The models with SERIAL "□88*****" or later (for FR-E700-SC-NNE and FR-E700-SC-ENE, "□89*****" or later) on the rating plate are supported.

*2 Line topology is also supported by FR-E800-E.

CASE 4 CC-Link IE connection via programmable controller



*1 GT27, GT25 only.

*2 In the CC-Link IE TSN configuration, select a switching hub by referring to the relevant manual for the programmable controller used.

*3 The models with SERIAL "□83*****" or later on the rating plate are supported.

*4 The FR-A8NCE with SERIAL "□83****" or later is supported.

*5 The models with SERIAL "□96*****" or later (made in Japan) or "□97*****" or later on the rating plate are supported.

*6 Set the third octet of the inverter's IP address to the network No., and set the fourth octet to the station number.

GOT DRIVE INVERTER STARTUP

Challenge We want to efficiently start up the system, but programming and settings are a hassle.

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

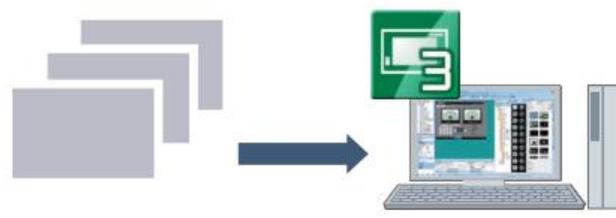


GOT2000

Inverter

STEP 2 >>>

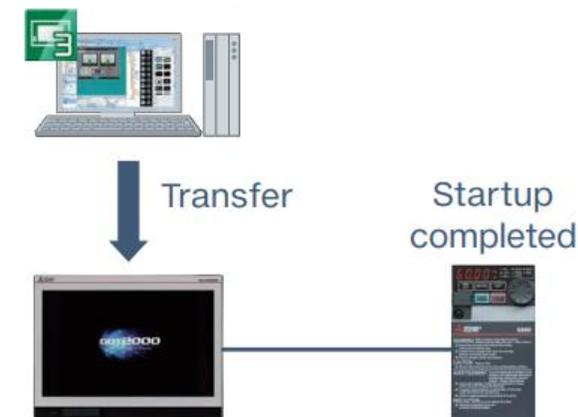
Sample screens matching the connection type can be used for the user's project data.



Sample screen

STEP 3 >>>

Transfer the project data to the GOT.



GOT2000

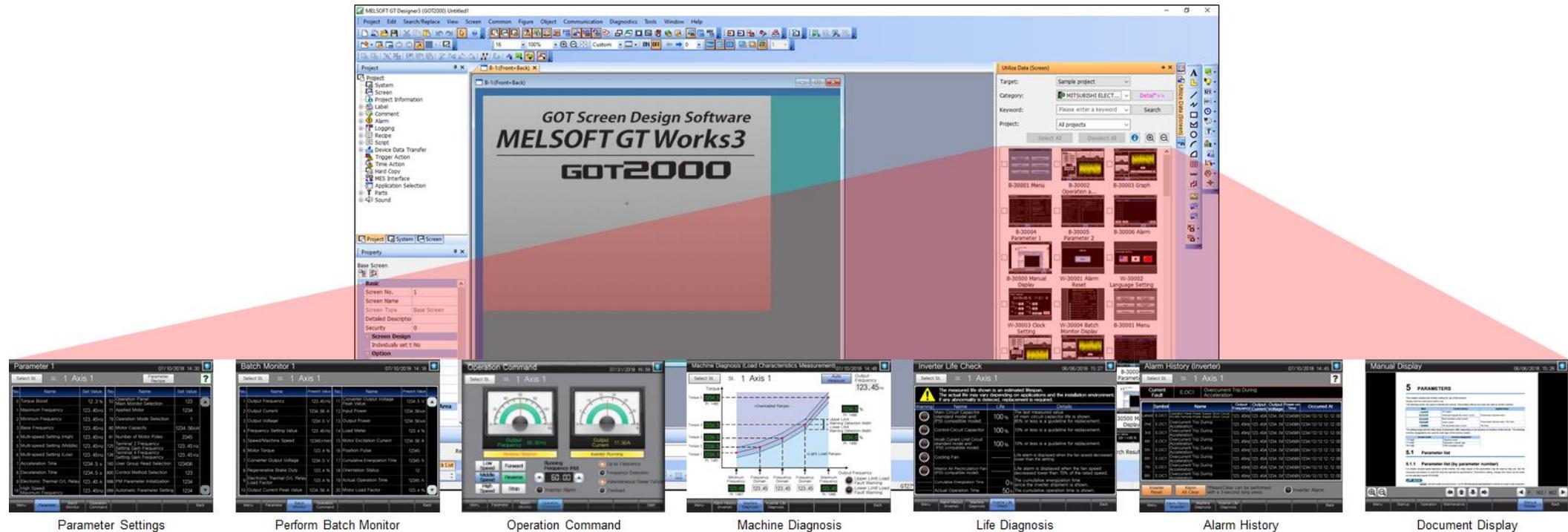
Inverter

GOT DRIVE INVERTER FUNCTIONS

Reasons why drive control interactive solutions are chosen:

- | | |
|---------------------------------------|---|
| // Easy startup | Three step easy startup |
| // Parameter settings | Easily adjust parameters with the GOT |
| // Parameter Recipe | Back up/restore the pre-adjustment parameters with the GOT |
| // FA Transparent | Debugging via GOT without opening the control panel |
| // Batch Monitor | Perform batch monitor of the inverter with the GOT |
| // Operation Command | Issue operation commands to the inverter from the GOT |
| // Machine Diagnosis | Detect system errors with the inverter, and display them on the GOT |
| // Inverter Life Diagnosis | Replacement timing of inverter components can be displayed on the GOT |
| // Backup/Restoration | Automatically back up the inverter parameters with the GOT |
| // Alarm Display | Display details of the inverter alarms on the GOT |
| // Document Display | Display the inverter manual on the GOT |
| // Sample Screen | Support screen creation with sample screens |
| // Easy to Use Screen Design Software | Freely create monitor screens |

GOT DRIVE INVERTER SAMPLE SCREENS



Parameter Setting
Use the GOT to adjust the inverter's parameters.

Parameter Recipe
The current inverter parameters can be backed up (saved) as a recipe file using the GOT.

Batch Monitor
The inverter's current values such as the output frequency, output current, and output voltage can be monitored with the GOT.

Operation Command
The inverter operation commands can be issued from the GOT.

Machine Diagnosis
The relation of output frequency and torque in the normal state can be saved in the inverter, and used to check the operations.

Life Diagnosis
GOT can be used to monitor the operation status of the inverter's components and confirm the replacement timing.

Alarm Display
All error codes and details of alarms occurring in the inverter can be confirmed with the GOT.

Document Display
All manuals and relevant documents can be displayed on the GOT.

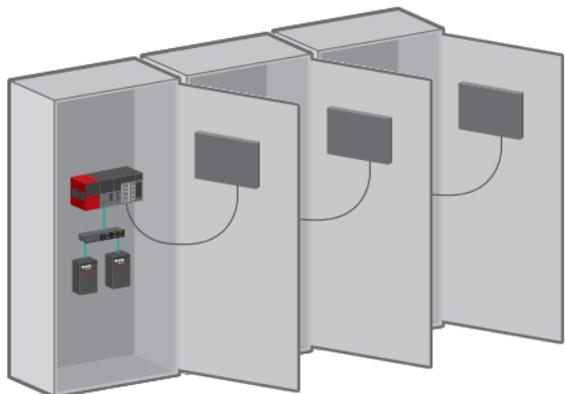
GOT DRIVE INVERTER PARAMETER SETTINGS

Challenge We want to set parameters without opening the control panel.

Easily set and monitor inverter 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
- // Parameters can be adjusted on the GOT, which eliminates the need of going to the control panel.
- // Parameter list helps you to find the parameter.
- // Parameters can be written into multiple inverters from one GOT.



No need to open and close the cabinets
Easily set the parameters with the GOT

Parameter 1 07/10/2018 14:30

Select St. st. 1 Axis 1 Parameter Recipe

No.	Name	Set Value	No.	Name	Set Value
0	Torque Boost	12.3 %	52	Operation Panel Main Monitor Selection	123
1	Maximum Frequency	123.45Hz	71	Applied Motor	1234
2	Minimum Frequency	123.45Hz	79	Operation Mode Selection	1
3	Base Frequency	123.45Hz	80	Motor Capacity	1234.56kW
4	Multi-speed Setting (High)	123.45Hz	81	Number of Motor Poles	2345
5	Multi-speed Setting (Middle)	123.45Hz	125	Terminal 2 Frequency Setting Gain Frequency	123.45 Hz
6	Multi-speed Setting (Low)	123.45Hz	126	Terminal 4 Frequency Setting Gain Frequency	123.45 Hz
7	Acceleration Time	1234.5 s	160	User Group Read Selection	123456
8	Deceleration Time	1234.5 s	800	Control Method Selection	123
9	Electronic Thermal O/L Relay	123.45 A	998	PM Parameter Initialization	1234
18	High Speed Maximum Frequency	123.45Hz	999	Automatic Parameter Setting	1234

Menu Parameter Batch Monitor Operation Command Back

GOT DRIVE INVERTER PARAMETER RECIPE

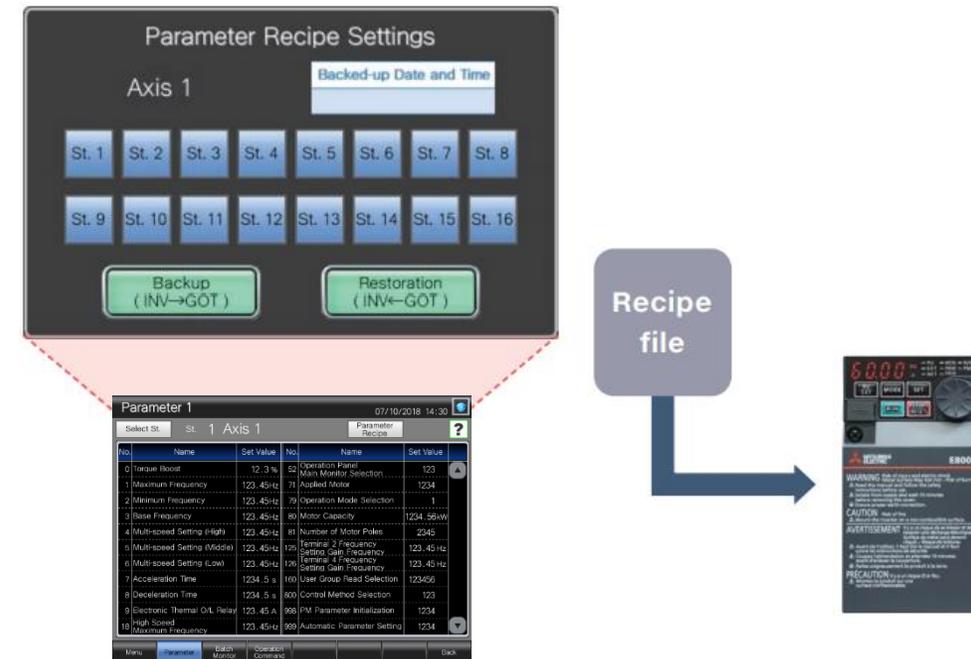
Challenge We want to return the parameters to the pre-adjustment values, but what were the values ...

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).

// 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

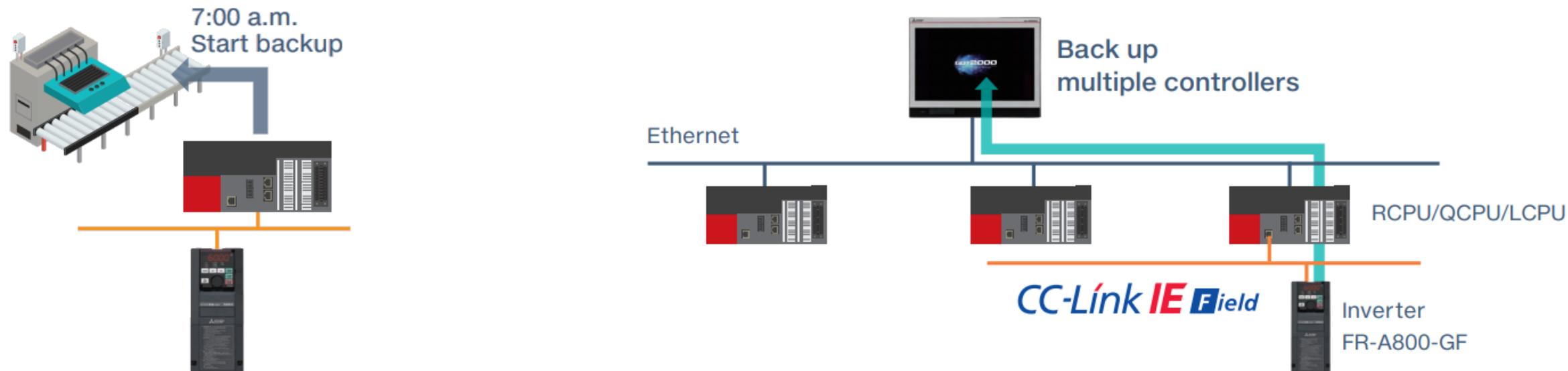


GOT DRIVE INVERTER PERIODICALLY BACKUP / RESTORATION

Challenge We want to periodically back up the inverter parameters.

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.

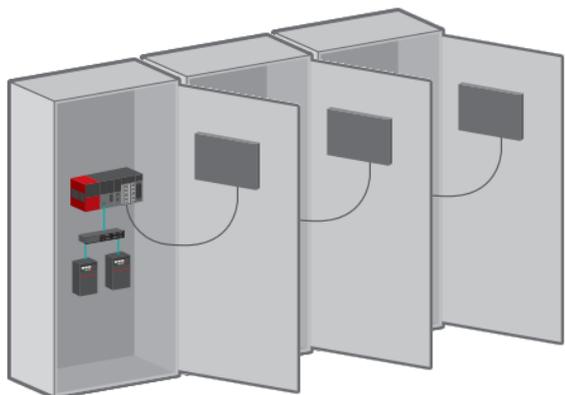


GOT DRIVE INVERTER BATCH MONITOR

Challenge We want to monitor the inverter status without opening the control panel.

Monitor multiple parameters of the inverter on 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.
- // Multiple inverters can be monitored by changing the station number.



No need to open and close the cabinets
Easily read the parameters from the GOT

Batch Monitor 1 07/10/2018 14:18

Select St. St. 1 Axis 1

No.	Name	Present Value	No.	Name	Present Value
1	Output Frequency	123.45Hz	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	123.45Hz	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 %

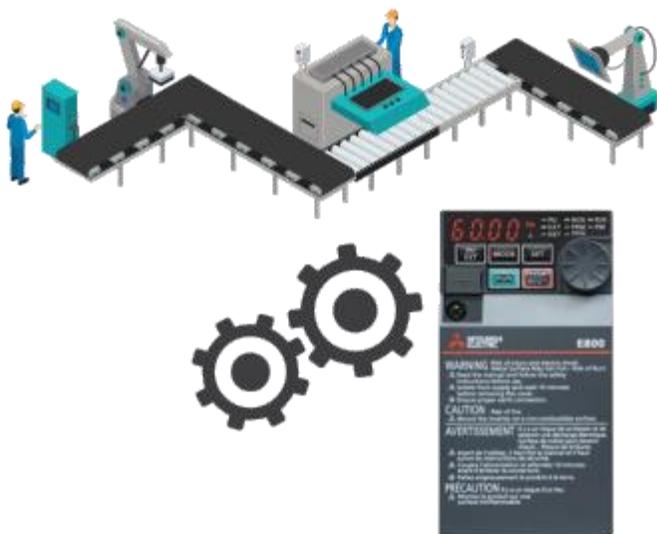
Menu Parameter **Batch Monitor** Operation Command Back

GOT DRIVE INVERTER OPERATION COMMAND

Challenge We want to easily test and start up the system while confirming the inverter's operation.

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.



GOT DRIVE INVERTER MACHINE DIAGNOSIS

Challenge We want to detect clogged filters and clogged pipes. What is the cause of the system error ...

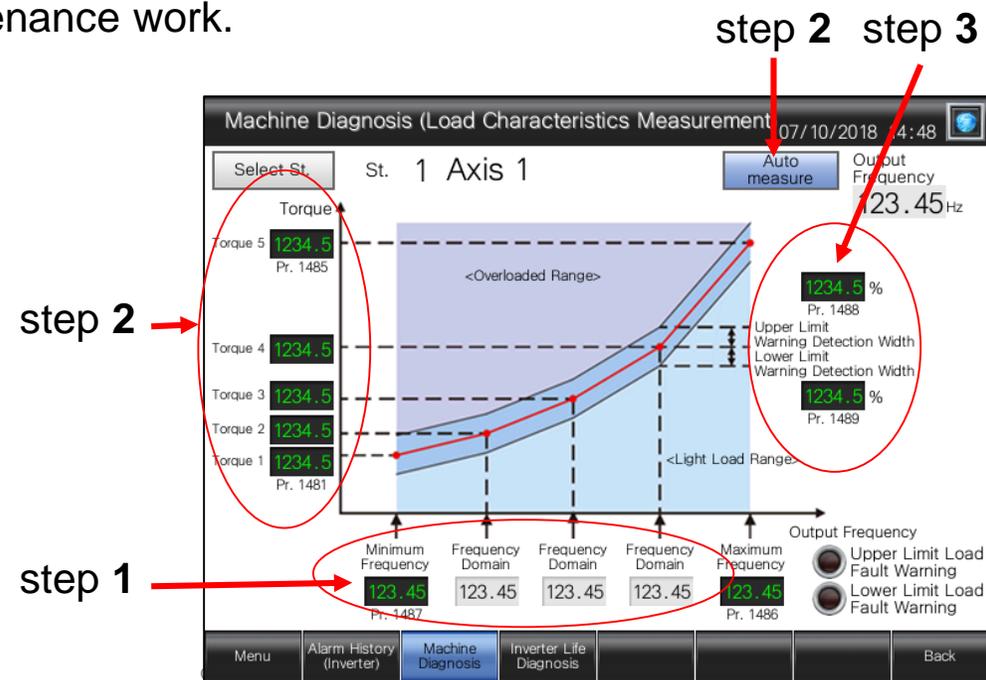
Detect system errors with the inverter, and display them on the GOT

// 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 The inverter automatically measures the relation of the output frequency and torque in the normal state, and calculates the load characteristics reference value. The load characteristics reference value calculated in the above 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%.

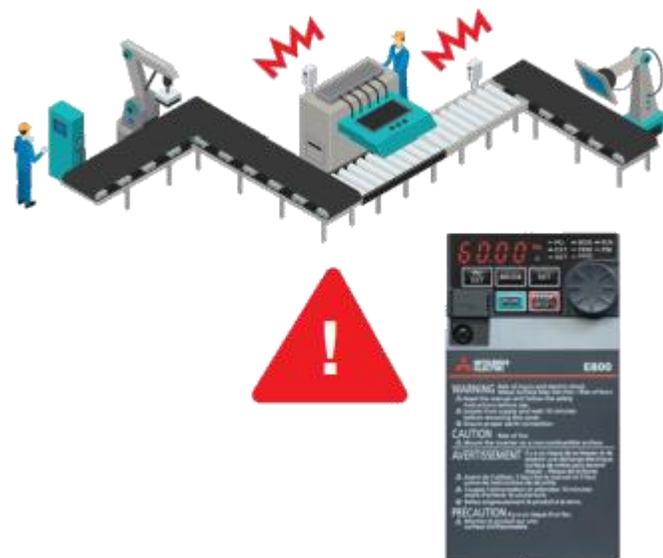


GOT DRIVE INVERTER LIFE DIAGNOSIS

Challenge We want to know the inverter replacement timing. The inverter has failed ...

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.



06/06/2018 15:27

Inverter Life Check

Select St. st. 1 Axis 1

! The measured life shown is an estimated lifespan. The actual life may vary depending on applications and the installation environment. If any abnormality is detected, replacement is required.

Warning	Name	Life	Details
○	Main Circuit Capacitor (standard model and IP55 compatible model)	100%	The last measured value of main circuit capacitor life is shown. 85% or less is a guideline for replacement.
○	Control-Circuit Capacitor	100%	10% or less is a guideline for replacement.
○	Inrush Current Limit Circuit (standard model and IP55 compatible model)	100%	10% or less is a guideline for replacement.
○	Cooling Fan	-----	Life alarm is displayed when the fan speed decreased lower than the setting.
○	Interior Air Recirculation Fan (IP55 compatible model)	-----	Life alarm is displayed when the fan speed decreased lower than 70% of the rated speed.
-----	Cumulative Energization Time	0h	The cumulative energization time since the inverter shipment is shown.
-----	Actual Operation Time	50h	The cumulative operation time is shown.

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

GOT DRIVE INVERTER ALARM DISPLAY

Challenge We want to easily confirm the details of current alarms. What are the details of the inverter error codes ...

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) 07/10/2018 14:45

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, RS-485 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

GOT DRIVE INVERTER DOCUMENT DISPLAY

Challenge We want to see the manuals or own startup documents on the GOT2000.

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.

// Alarm details can be checked.

// Parameter details can be checked.

// Paperless manuals.

// User created procedures manual can also be displayed as well as manufacturer manuals.



Alarm History (Inverter) 07/10/2018 14:45

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	Occurrence	
Latest	E.OC1	Operation Panel Power Supply Short Circuit, RS-485 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

Manual Display 06/06/2018 15:26

5 PARAMETERS

This chapter explains the function setting for use of this product. Always read the instructions before use. The following marks are used to indicate the controls. (Parameters without any mark are valid for all the controls.)

Mark	Control method	Applied motor
▽	V/F control	Three-phase induction motor
▽	Advanced magnetic flux vector control	
▽	Real synchronous vector control	Ultra-phase induction motor, FIM motor
▽	Vector control	
▽	FIM sensorless vector control	FIM motor

The setting range and the initial value of parameters differ depending on the structure or functions of the inverter. The following common designations are used for each type of the inverter models.

Inverter model	Common designation
FR-A000	Standard motor
FR-A001	Standard motor type
FR-A002	IP55 compatible model

5.1 Parameter list

5.1.1 Parameter list (by parameter number)

For simple variable speed operation of the inverter, the initial values of the parameters may be used as they are. Set the necessary parameters to meet the load and operational specifications. Parameter's setting, change and check can be made on the operation panel (FR-DU08).

NOTE: ▽ indicates simple mode parameters. Use Pr-160 User group read selection to indicate the simple mode parameters.

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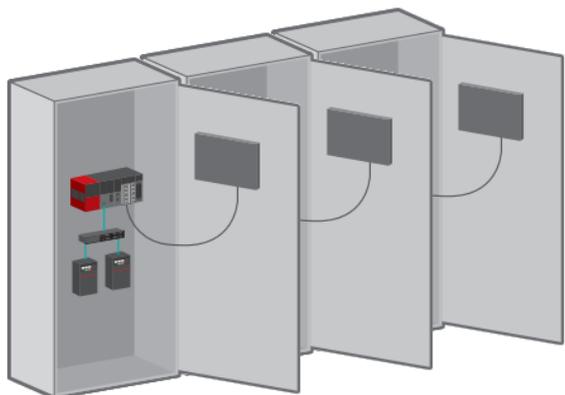
Menu Startup Operation Maintenance Manual Display Back

GOT DRIVE INVERTER FA TRANSPARENT

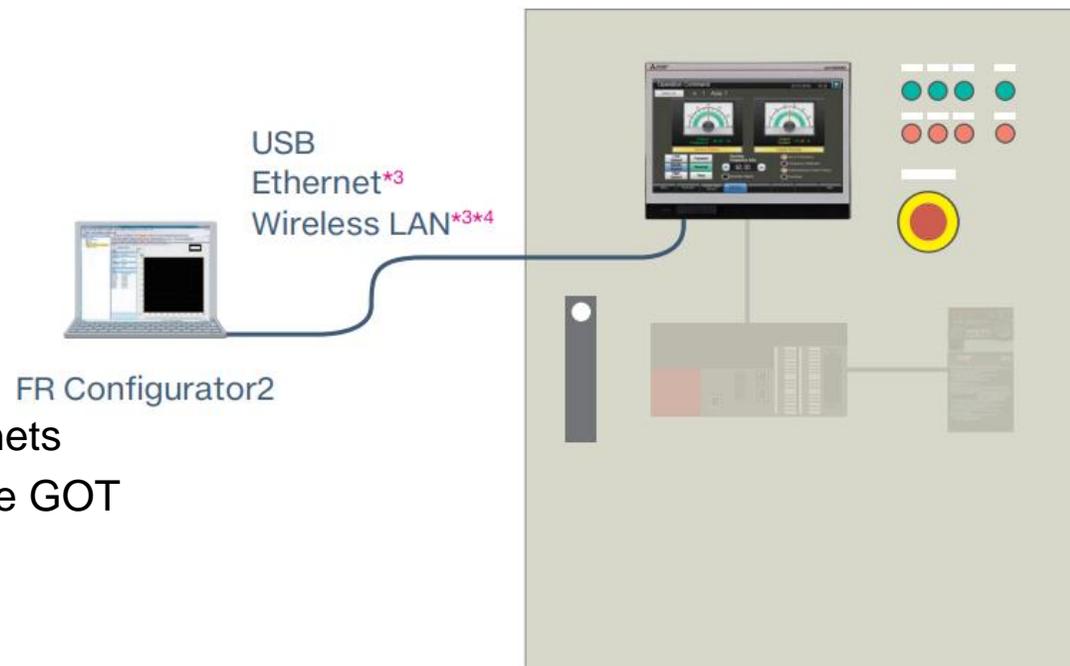
Challenge We want to perform debugging smoothly without opening and closing the cabinets.

Debugging via GOT without opening the cabinet

// Without opening the cabinet and by only connecting a personal computer to the front USB interface on the GOT, you can use the GOT as a transparent gateway to enable parameter monitoring and setting, startup, and adjustment.



No need to open and close the cabinets
Easily connect to the inverter with the GOT

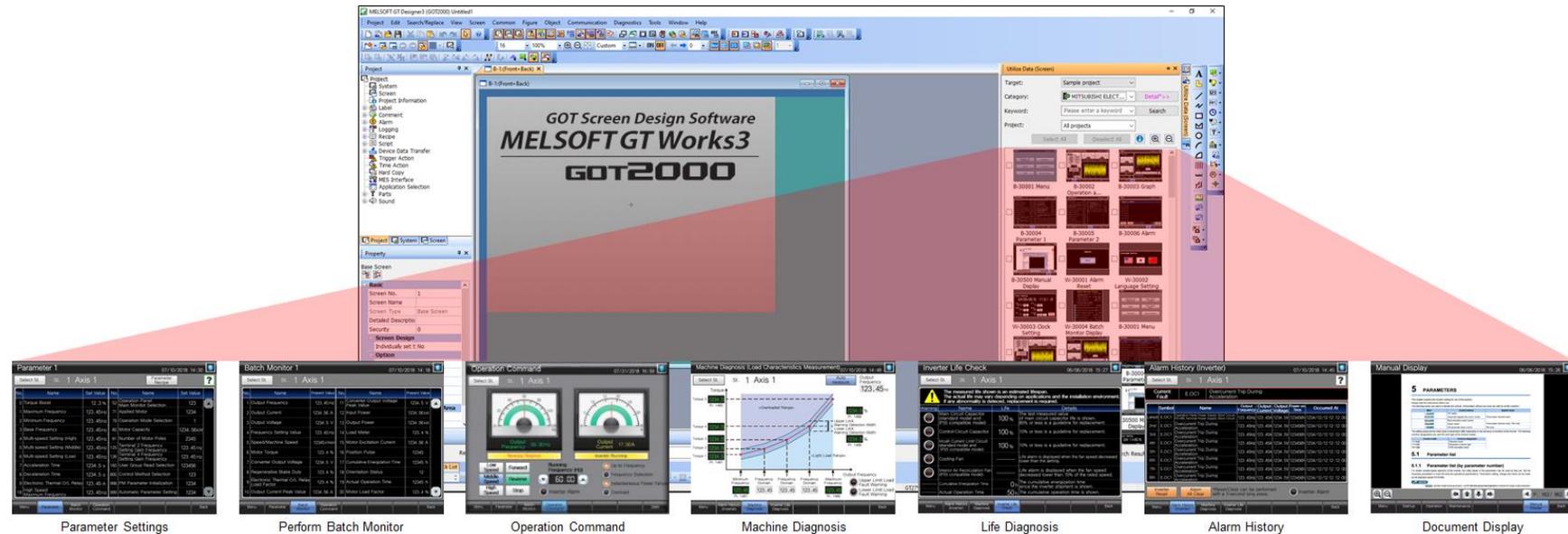


MELSOFT GT WORKS3 SAMPLE SCREENS

Challenge We want to create screens easily and not from scratch.

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.

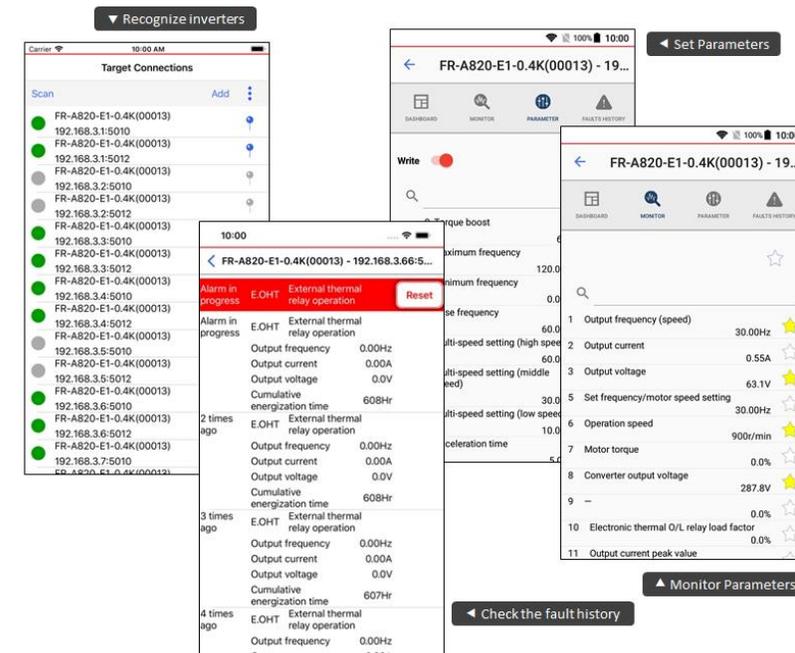


FR CONFIGURATOR MOBILE

Challenge We want to check alarms and set / monitor the inverter parameters from any location.

The new mobile app enables operation of inverters using smart phones or tablets

// Mitsubishi Electric introduces a new app for tablets and smartphones that provides convenient commissioning, maintenance, troubleshooting, parameterization and monitoring support for our FR-E800, FR-F800E and FR-A800E inverters.



GOT Easy Drive Control (Servo) Interactive Solutions

MITSUBISHI GRAPHIC OPERATION TERMINAL

GOT2000

MITSUBISHI SERVO AMPLIFIERS & MOTORS

+ MELSERVO-J4

Designed to suit your application and
improve maintenance



GOT Drive

GOT DRIVE SERVO

Challenges that cannot be resolved with just the servo can now be resolved with GOT2000 and servo interactive functions. Advanced drive control connectivity provides additional value to your system.

The GOT2000 provides advanced functionality and improves connectivity with Mitsubishi Electric servo systems. It provides some functions of MR 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.

// [Mitsubishi Electric Website landing page](#)

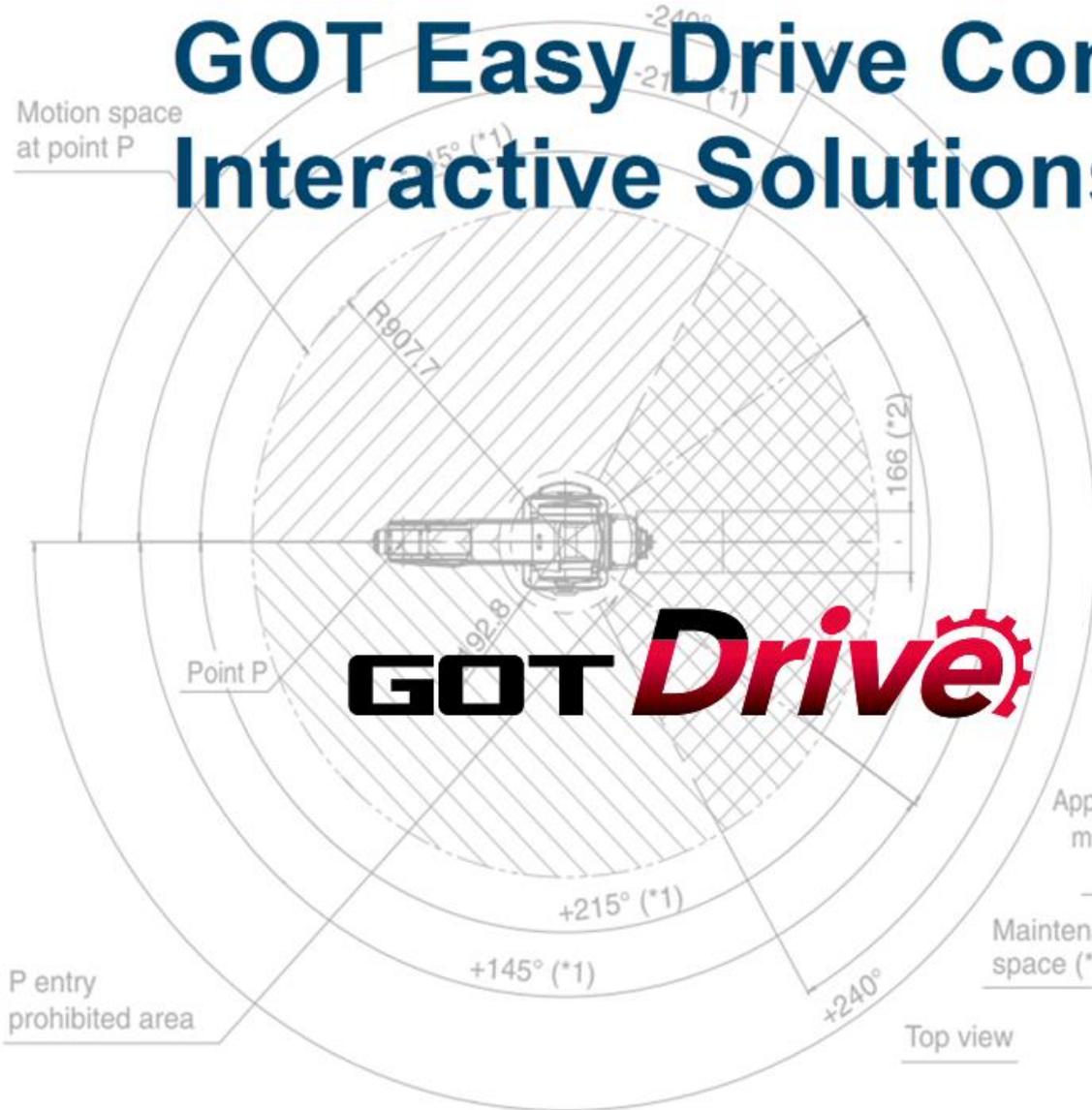
// [GOT2000 Drive Control \(Servo\) Interactive Solutions catalog](#)

GOT Easy Drive Control (Servo) Interactive Solutions

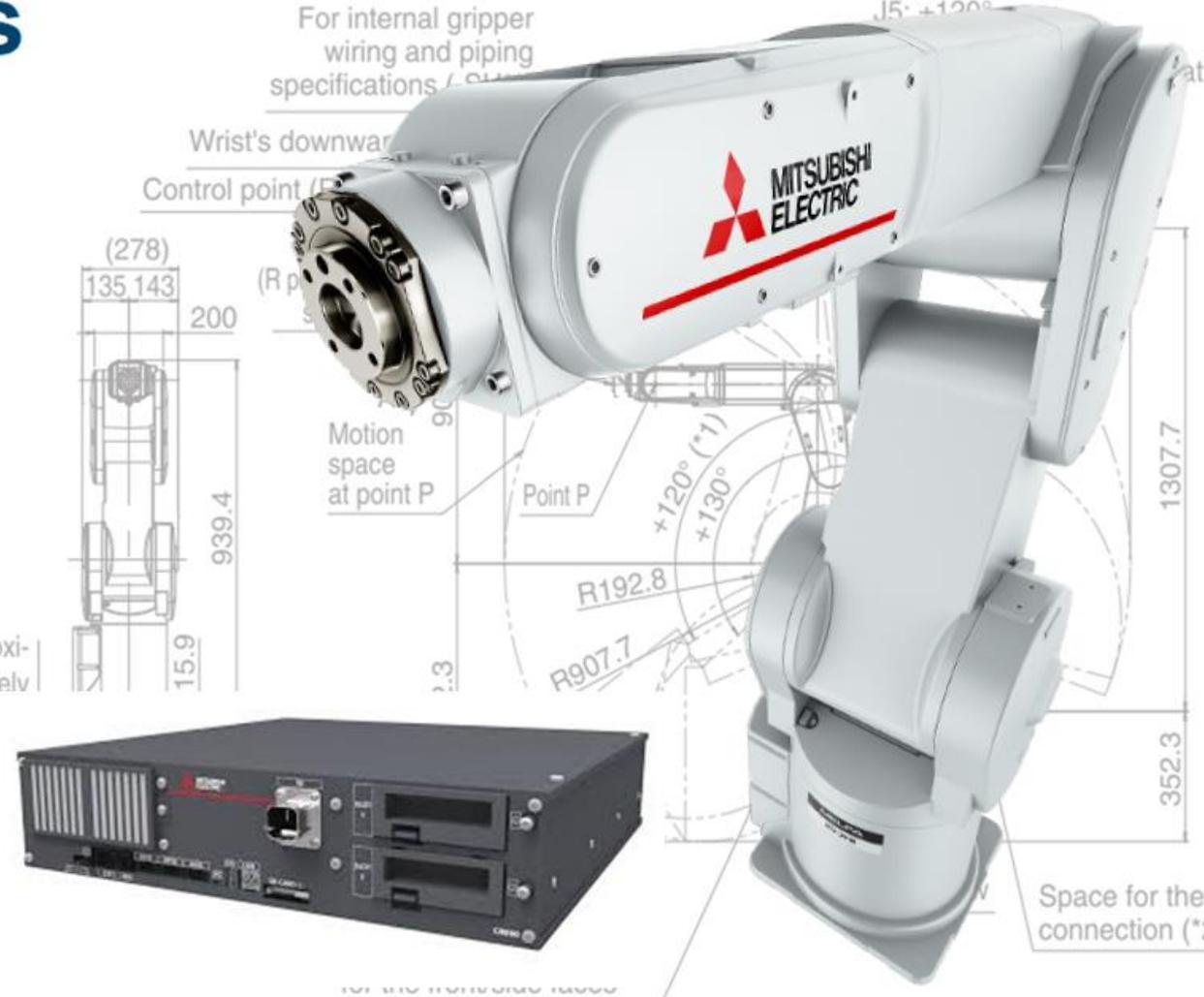
Drive recorder function	System launcher (servo network) function	R motion monitor function / Q motion monitor function
Servo amplifier graph function	Power monitor	Motion SFC monitor function
Machine diagnosis function	Alarm display function	Motion program editor function
Servo amplifier life diagnosis function	Servo amplifier monitor function	GOT Drive Plus (paid template screens)
One-touch tuning function / Tuning function	Intelligent module monitor function	



GOT Easy Drive Control (Robot) Interactive Solutions



for each axis:
 J1: $\pm 240^\circ$
 J2: -110° to 130°
 J3: 0° to 162°
 J4: $\pm 200^\circ$
 J5: $+120^\circ$



GOT DRIVE ROBOT

Challenges that cannot be resolved with just the robot can now be resolved with GOT2000 and robot interactive functions. Advanced drive control connectivity provides additional value to your system.

The GOT2000 provides advanced functionality and improves connectivity with Mitsubishi Electric robot systems. It provides some functions of RT Toolbox3. 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.

// [Mitsubishi Electric Website landing page](#)

GOT Easy Drive Control (Robot) Interactive Solutions

Interactive functions to support startup and maintenance

Backup / restore

Robot status monitoring function

Logging & Graphs list

Recipe function

FA transparent

UPCOMING WEKNOW WEBINARS

WeKnow Webinar - Servo dimensionering eenvoudig gemaakt

Software voor de dimensionering van servosystemen kan u begeleiden bij de selectie van AC servoprodukten om de ontwerptijd te verkorten. De Motorizer software van Mitsubishi Electric leidt u door de stappen om het belastingsmechanisme en het ingangspatroon te definiëren, motor- en aandrijvingsfilters toe te passen en de combinatie te selecteren die het best voldoet aan de vereisten van uw toepassing.

Ontdek samen met ons hoe snel u aanpassingen kunt doorvoeren, resultaten kunt vergelijken en verschillende oplossingsopties kunt overwegen terwijl wij u door het proces leiden.

Dinsdag 9 maart van 11:00 tot 12:00 Gepresenteerd door Edwin van Baar en Micha Daman

WeKnow Webinar - Al gehoord van Time Sensitive Networking, maar u weet nog niet precies wat het is?

Al gehoord van Time Sensitive Networking, maar u weet nog niet precies wat het is? Schrijf u in voor dit webinar en kom alles te weten over TSN. Ontdek ook hoe Mitsubishi Electric TSN aan het werk zet met hun uitgebreide CC-Link IE TSN oplossing.

Dinsdag 23 maart van 11:00 tot 12:00 Gepresenteerd door John Browett (CLPA) en Micha Heitlager



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WeKnow
series of online webinars

WeKnow
Webinars

New Developments and Solutions ▶▶

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 **MITSUBISHI
ELECTRIC**
Changes for the Better

ANY
QUESTIONS
?