

Graphic Operation Terminal
GOT2000 NEWS Vol.13

GT Works3 Ver.1.250L
(January 2021 Release)

Upgraded

GOT Drive

GOT2000 Drive Control (Servo) Interactive Solutions



MELSERVO-J5 Series and MELSERVO-JET Series diagnosis functions on GOT make preventive and post maintenance more efficient

New feature

Network camera live image display Pan, tilt, and zoom (PTZ) adjustment



Use GOT to control network cameras via the MELSEC iQ-R camera recorder module
Cameras at the shop floor are now easier to use than ever

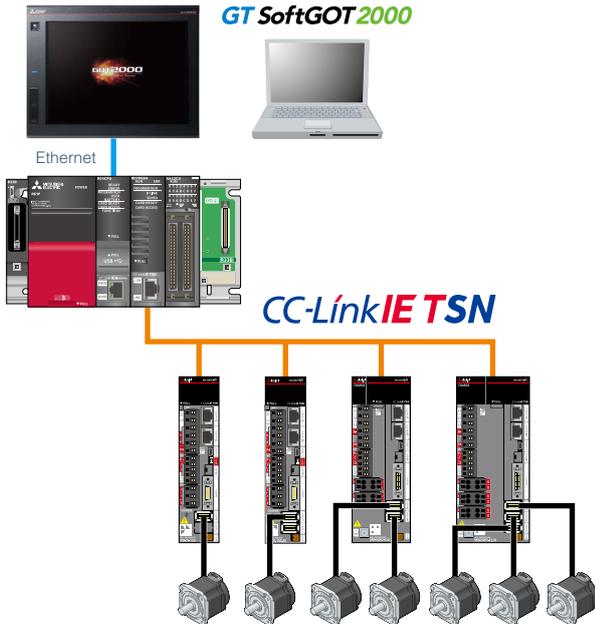
NEWS 1 MELSERVO-J5 Series and MELSERVO-JET Series diagnosis functions available on GOT

Connection to the MELSEC iQ-R Series Motion modules has been expanded

✓GT27 ✓GT25 ✓GT23 ✓GT21 ✓GS21 ✓SoftGOT

In addition to GOT2000, GT SoftGOT2000 can be connected to MELSERVO-J5 Series and MELSERVO-JET Series via the MELSEC iQ-R Series Motion module to monitor servo amplifiers and adjust their parameters.

System configuration



Supported models

Type	Series	Model
Programmable controller CPU	MELSEC iQ-R	R□CPU
		R□ENCPU
Motion module	MELSEC iQ-R	RD78G4
		RD78G8
		RD78G16
		RD78G32
		RD78G64
		RD78GHV
		RD78GHW
Servo amplifier	MELSERVO-J5	MR-J5-□G
		MR-J5-□G-RJ
		MR-J5W2-□G
	MELSERVO-JET	MR-J5W3-□G
		MR-JET-□G

Interactive functions with MELSERVO-J5 Series and MELSERVO-JET Series have been released

✓GT27 ✓GT25 □GT23 □GT21 □GS21 ✓SoftGOT

GOT2000 Drive Control (Servo) Interactive Solutions provide various functions with sample screens*1 and system applications.

Provided functions

✓ : Function supported × : Not supported – : Not applicable

Process		Sample screen*1	System application	GT27	GT25	SoftGOT 2000		
Startup, adjustment	Setting	Parameter settings	–	✓	✓	✓		
	Adjustment	One-touch tuning	–	✓	✓	✓		
		Tuning	–	–	✓	✓	✓	
	–	Servo amplifier graph*2	–	✓	✓	×		
Maintenance	Troubleshooting	Alarm display	–	✓	✓	✓		
		–	Drive recorder	–	✓	✓	×	
		–	System launcher (servo network)*2	–	✓	✓	×	
	Predictive maintenance	Machine diagnosis (friction estimation)	–	–	✓	✓	✓	
		Machine diagnosis (tension estimation)	–	–	✓	✓	✓	J5 Only!
		Machine diagnosis (vibration estimation)	–	–	✓	✓	✓	
		Gear failure diagnosis	–	–	✓	✓	✓	J5 Only!
Encoder communication circuit diagnosis	–	–	✓	✓	✓	J5 Only!		
Servo amplifier life diagnosis	–	–	–	✓	✓	✓		

*1 Sample screens to connect to MELSERVO-JET Series are not available.

*2 Supported by GT Works3 Version 1.255R or later.

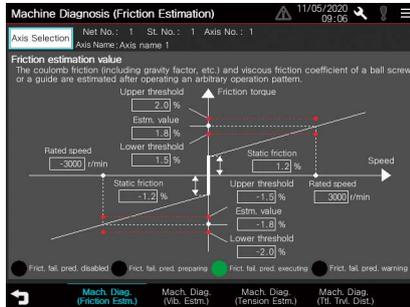
Sample screens

GT27 GT25 GT23 GT21 GS21 SoftGOT

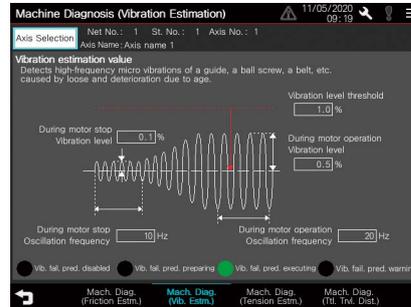
Sample screens for MELSERVO-J5 are available on GOT to make it easy to display parameters and to set various diagnosis modes, which are necessary for startup, adjustment, and maintenance work.

Application Predicting ball screw and linear guide failure

Machine Diagnosis (Friction Estimation)

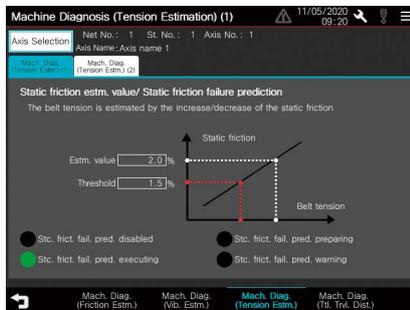


Machine Diagnosis (Vibration Estimation)

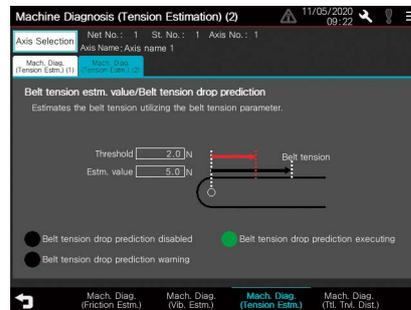


Application Predicting belt failure

Machine Diagnosis (Tension Estimation) (1)

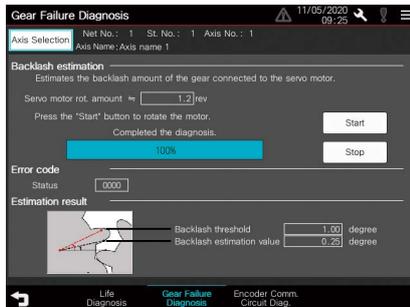


Machine Diagnosis (Tension Estimation) (2)



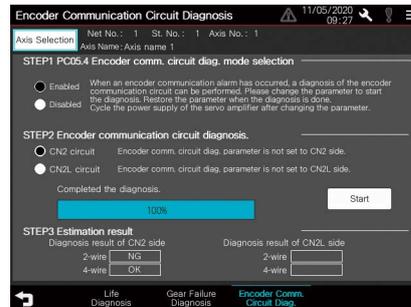
Application Monitoring gear wear

Gear Failure Diagnosis



Application Identifying whether the failure is caused by an encoder or a servo amplifier

Encoder Communication Circuit Diagnosis



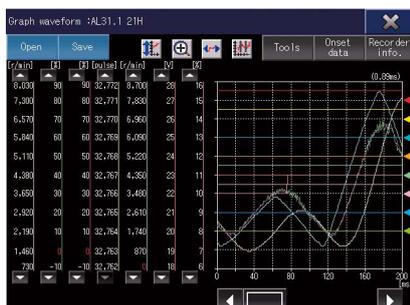
System applications

GT27 GT25 GT23 GT21 GS21 SoftGOT

The functions to display the servo data in a waveform and to display the servo network configuration diagram are provided as system applications. If an alarm occurred, it is possible to check the system information such as serial numbers and model names of the servo amplifier and the servo motor.

Application Checking the cause of an alarm that occurred on a servo amplifier

Drive Recorder



For the details, please refer to the GOT2000 Series Drive Control (Servo) Interactive Solutions catalog (L(NA)08335ENG).

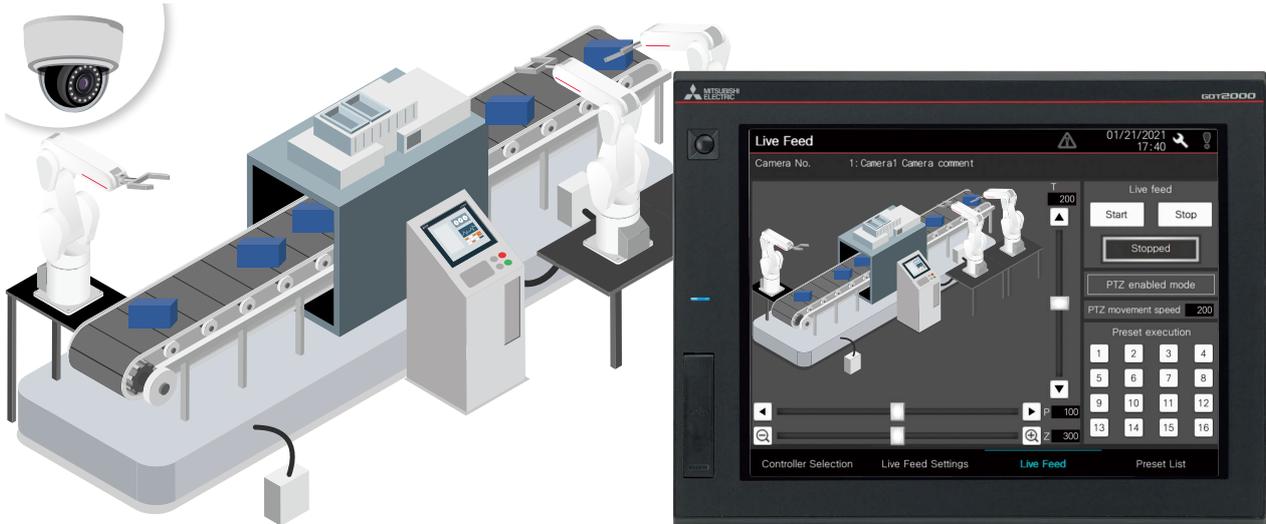
NEWS 2 Network camera live image display and PTZ adjustment function available on GOT

Supporting control of network cameras connected via the MELSEC iQ-R camera recorder module

GT27
 GT25
 GT23
 GT21
 GS21
 SoftGOT

GOT2000 and GT SoftGOT2000 can be used to display the live image from a network camera via the MELSEC iQ-R camera recorder module and adjust the P (pan), T (tilt), and Z (zoom) settings of the network camera.

▶ Checking a live image being captured by the network camera on GOT eliminates the need for a personal computer.



▶ P (pan), T (tilt), and Z (zoom) settings can be adjusted on the GOT near the object while checking a live image from the network camera.

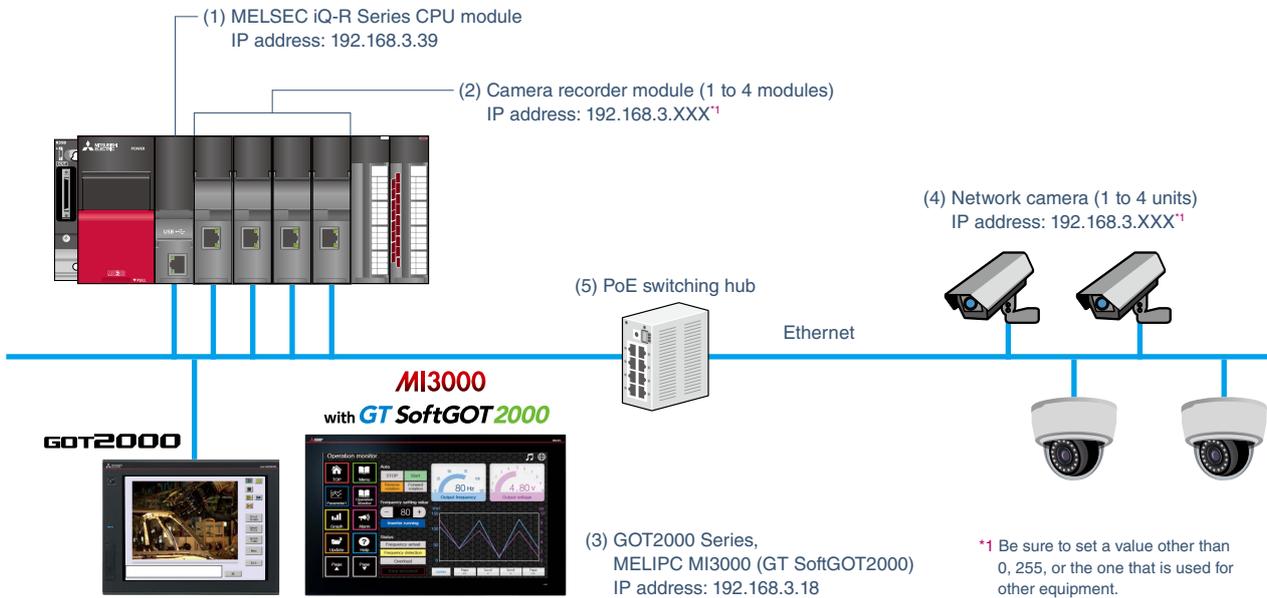


Sample screens for live & PTZ cameras connected via the MELSEC iQ-R camera recorder module

GT27
 GT25
 GT23
 GT21
 GS21
 SoftGOT

Sample screens are available for live image streaming and PTZ adjustment of network cameras that are connected via the MELSEC iQ-R camera recorder module.

► System configuration supported by the sample screens



Equipment	Remarks
(1) MELSEC iQ-R Series CPU module	· The "Communications by Network No./Station No." setting should not be changed from "Disable".
(2) Camera recorder module RD81RC96-CA	· Up to four modules can be switched in sample screens. · The "GOT Linkage Enable/Disable" setting should be set to "Enable". · Set the IP address of GOT2000 or MELIPC MI3000 to the IP address of the FTP server. · The login name and the password of the FTP server should be the same as those in the FTP server setting of GOT2000 or MELIPC MI3000.
(3) GOT2000 or MELIPC MI3000 (GT SoftGOT2000)	· Set the FTP Server function when using GOT2000. Enable the FTP server of Windows® OS when using MELIPC MI3000. · Do not use sample screens when activating multiple modules of GT SoftGOT2000.
(4) Network camera AXIS M5054, etc.*2	· The setting to allow a camera recorder module to detect the camera should be completed in advance. · Up to four network cameras can be accessed from sample screens to display live images or adjust PTZ settings.
(5) PoE switching hub (IEEE802.3at (PoE+) supported)*3	· Used to connect a CPU module, camera recorder modules, GOT2000/MI3000, and network cameras.

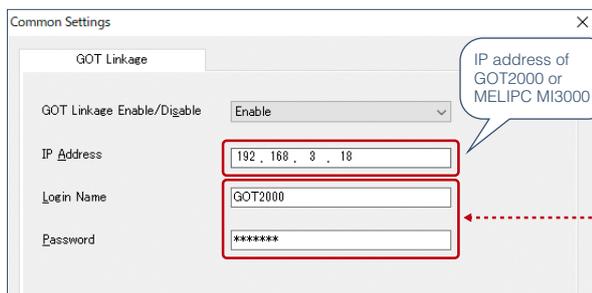
*2 For the supported network cameras, please refer to the Technical Bulletin "Applicable Products for Camera Recorder Module" (FA-A-0326).

*3 PoE is an abbreviation of Power over Ethernet.

► Settings to link a camera recorder module and GOT (FTP settings)

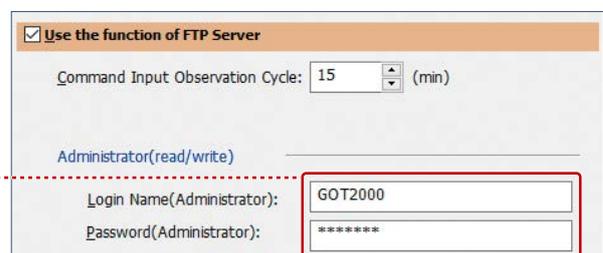
GX Works3

[Common Settings] in the Module Extended Parameter of the camera recorder module



GT Designer3

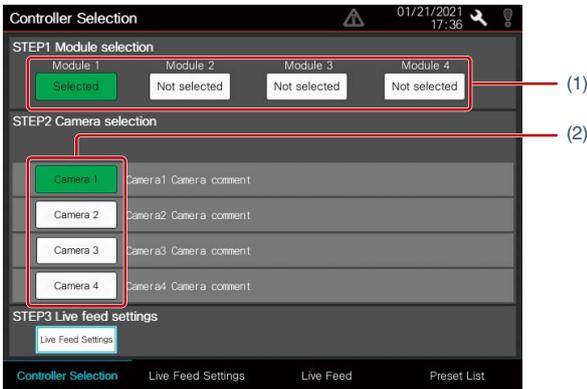
[Common] > [Controller Setting] > [Network/Duplex Setting] > [Gateway] > [FTP Server]



► How to use sample screens for live & PTZ cameras connected via the MELSEC iQ-R camera recorder module

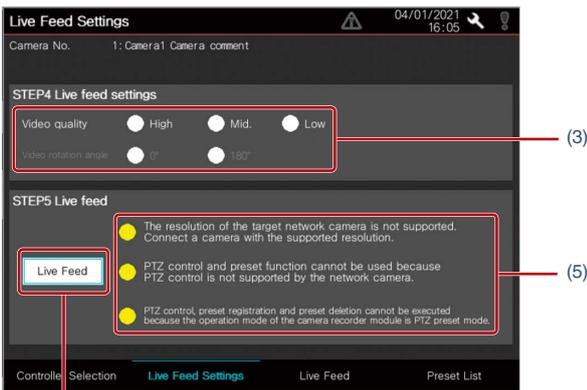
Step 1 Prepare the MELSEC iQ-R Series CPU module, a camera recorder module, network cameras, GOT2000/MELIPC MI3000, and configure the system. Obtain sample screens, change settings according to the system configuration, and write the data to GOT2000/MELIPC MI3000. For the settings of each equipment, please refer to the “► System configuration supported by the sample screens” and the Sample Screen Manual.

Step 2 Select the MELSEC iQ-R camera recorder module and network cameras.



- (1) Select the MELSEC iQ-R camera recorder module that manages network cameras to enable live image streaming and PTZ adjustment on GOT. Only one module can be selected. When selecting a camera recorder module, the switches for the network cameras that are connected to the module appear.
- (2) Select a network camera from “Camera 1” to “Camera 4” to enable live image streaming and PTZ adjustment on GOT.

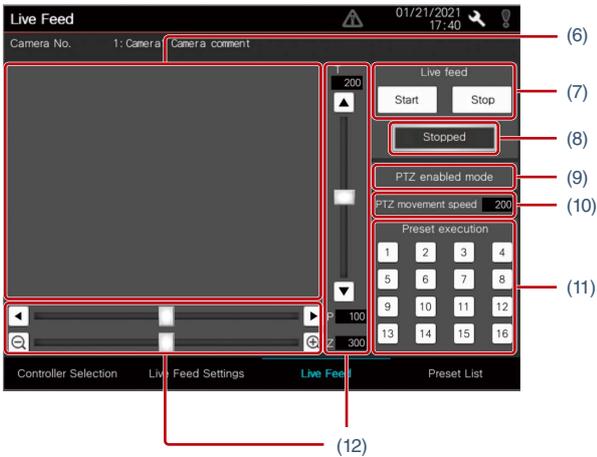
Step 3 Adjust the live image quality and the display angle for the selected network camera.



- (3) Adjust the live image quality and the display angle for the selected network camera. Update cycle of the live image changes depending on the selected image quality. The image display angle cannot be changed when the selected network camera does not support changing settings.
- (4) Switch to the screen for live image display and PTZ adjustment of the network camera.
- (5) Warning messages appear when there are limitations in the live image display depending on the functions supported by the network camera or the operation mode set for the camera recorder module.

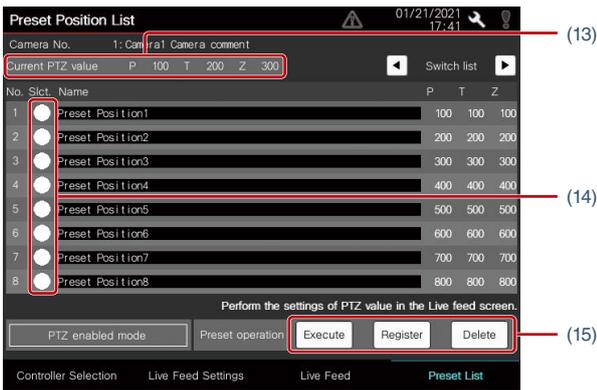
(4)

Step 4 Start displaying the network camera live image. PTZ adjustment of the camera can also be made.



- (6) The live image from the network camera is displayed.
- (7) Touch “Start” to start updating the live image; touch “Stop” to stop updating the live image.
- (8) The indicator shows whether the live image is displayed or stopped.
- (9) The indicator shows the operation mode of the currently operating camera recorder module and whether PTZ adjustment is enabled.
- (10) Set the movement speed of the network camera lens during PTZ adjustment.
- (11) PTZ values can be preset to the network camera.
- (12) PTZ values can be adjusted.

Step 5 Save the PTZ adjustment results.



- (13) Adjusted PTZ values are displayed.
 - (14) Select a preset position to save.
 - (15) Touch “Register” to save the adjusted PTZ values to the selected preset position.
- To display the live image with preset PTZ values, select a preset position in (14) and touch “Register” in (15).

► How to obtain sample screens

Sample screens are included in the installation DVD-ROM of GT Works3 Version 1.255R or later.
For how to obtain the latest sample screens, please contact your local sales office.

Trademarks and registered trademarks
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

USA Mitsubishi Electric Automation, Inc. 500 Corporate Woods Parkway, Vernon Hills, IL 60061, U.S.A. Tel: +1-847-478-2100	Mexico Mitsubishi Electric Automation, Inc. Mexico Branch 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	Brazil Mitsubishi Electric do Brasil Comercio e Servicos Ltda. Avenida Adelino Cardana, 293, 21 andar, Bethaville, Barueri SP, Brazil Tel: +55-11-4689-3000
--	---	--

Asia-Pacific Offices

China Mitsubishi Electric Automation (China) Ltd. Mitsubishi Electric Automation Center, No.1386 Hongqiao Road, Shanghai, China Tel: +86-21-2322-3030	Taiwan SETSUYO ENTERPRISE CO., LTD. 6F, No.105, Wugong 3rd Road, Wugu District, New Taipei City 24889, Taiwan Tel: +886-2-2299-2499	Korea Mitsubishi Electric Automation Korea Co., Ltd. 7F to 9F, Gangseo Hangang Xi-tower A, 401, Yangcheon-ro, Gangseo-Gu, Seoul 07528, Korea Tel: +82-2-3660-9569
Singapore Mitsubishi Electric Asia Pte. Ltd. 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Tel: +65-6473-2486	Malaysia Mitsubishi Electric Sales Malaysia Sdn. Bhd. Lot 11, Jalan 219, 46100 Petaling Jaya, Selangor Darul Ehsan, Malaysia Tel: +60-3-7626-5000	Indonesia PT. Mitsubishi Electric Indonesia Gedung Jaya 8th Floor, JL. MH. Thamrin No.12, Jakarta Pusat 10340, Indonesia Tel: +62-21-3192-6461
Vietnam Mitsubishi Electric Vietnam Co., Ltd. 11th & 12th Floor, Viettel Tower B, 285 Cach Mang Thang 8 Street, Ward 12, District 10, Ho Chi Minh City, Vietnam Tel: +84-28-3910-5945	Thailand Mitsubishi Electric Factory Automation (Thailand) Co., Ltd. True Digital Park Building Sukhumvit 101 Sukhumvit Road, Bang Chak, Prakanong, Bangkok, Thailand Tel: +66-2092-8600	Philippines MELCO Factory Automation Philippines Inc. 128, Lopez-Rizal St. Brgy, Highway Hills, Mandaluyong City, MM, Philippines Tel: +63-(0)2-8256-8042
India Mitsubishi Electric India Pvt. Ltd. Pune Branch Emerald House, EL-3, J Block, M.I.D.C., Bhosari, Pune - 411026, Maharashtra, India Tel: +91-20-2710-2000	Australia Mitsubishi Electric Australia Pty. Ltd. 348 Victoria Road, P.O. Box 11, Rydalmere, N.S.W. 2116, Australia Tel: +61-2-9684-7777	

European Offices

Germany Mitsubishi Electric Europe B.V. German Branch Mitsubishi-Electric-Platz 1, 40882 Ratingen, Germany Tel: +49-2102-486-0	UK Mitsubishi Electric Europe B.V. UK Branch Travellers Lane, UK-Hatfield, Hertfordshire, AL10 8XB, U.K. Tel: +44-1707-28-8780	Italy Mitsubishi Electric Europe B.V. Italian Branch Centro Direzionale Colleoni - Palazzo Sirio, Viale Colleoni 7, 20864 Agrate Brianza (MB), Italy Tel: +39-039-60531
Spain Mitsubishi Electric Europe B.V. Spanish Branch Carretera de Rubi 76-80-Apdo. 420, E-08174 Sant Cugat del Valles (Barcelona), Spain Tel: +34-935-65-3131	France Mitsubishi Electric Europe B.V. French Branch 25, Boulevard des Bouvets, 92741 Nanterre Cedex, France Tel: +33-1-55-68-55-68	Czech Republic Mitsubishi Electric Europe B.V. Czech Branch Pekarska 621/7, 155 00 Praha 5, Czech Republic Tel: +420-255-719-200
Turkey Mitsubishi Electric Turkey A.S. Umraniye Branch Serifali Mah. Kale Sok. No:41 34775 Umraniye - Istanbul, Turkey Tel: +90-216-969-2500	Poland Mitsubishi Electric Europe B.V. Polish Branch ul. Krakowska 48, 32-083 Balice, Poland Tel: +48-12-347-65-00	Russia Mitsubishi Electric (Russia) LLC St. Petersburg Branch Startovaya street, 8, BC "Aeroplaza", office 607; 196210, St. Petersburg, Russia Tel: +7-812-449-51-34
South Africa Adroit Technologies 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