

iQ Platform-compatible PAC Module Firmware Update

MELSEC iQ-R series

Tech-note



MELSEC iQ-R Series Broadcast

Ensuring latest functional version module

Hardware module management is now substantially easier with the MELSEC iQ-R Series. Up to now, obtaining the latest features new module versions offered required purchasing another module.

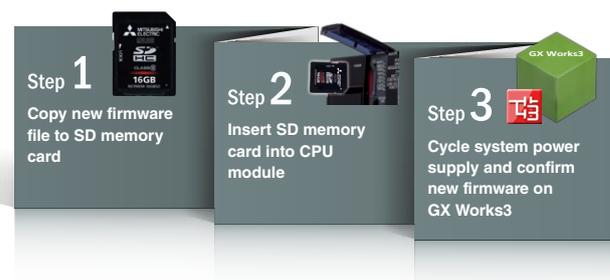
By utilizing the new module firmware update function, current modules can be updated to newer versions enabling support of newer features without the cost of replacing the module. The updating process is easy and quick, and requires no specialized software, reducing the amount of training required for development and maintenance personnel.

Convenience

- Ensure the latest firmware version
- Utilize new functions and features immediately
- No additional hardware cost
- Simple and easy firmware update process

Easy three-step firmware updating

The firmware update process is very easy and does not require any specialist software. The entire process requires only copying the firmware file to the SD card, inserting the card into the target module and then simply cycling the system power supply while holding down the SD CARD OFF button.



Firmware update process

- 1 Obtain*1 the firmware update data related to the module to be updated.
- 2 The firmware update file is in a compressed folder (zip file). Decompress the folder "\$FWUPDFILES\$" and save it using the same name directly below the SD memory card root folder.



Updating the firmware

R120PCPU
READY
ERROR
PROGRAM RUN
USER

Turn system power off and insert the SD memory card (stored with firmware update files) into the SD memory card slot of the CPU module.

R120PCPU
READY
ERROR
PROGRAM RUN
USER

To start the firmware update, hold down the SD CARD OFF button while turning the system power supply on. Both the READY LED and PROGRAM LED will turn to red and the PROGRAM RUN LED will turn green.

R120PCPU
READY
ERROR
PROGRAM RUN
USER

Once the firmware update process is completed, the PROGRAM RUN LED will flash green. If an error occurs during the update process, the PROGRAM LED will flash red. Details of abnormal termination are shown below.

Firmware update abnormal termination

Operating status	CPU module LEDs	Corrective actions
FlashROM (system memory) error	ERROR flashing	<ul style="list-style-type: none"> • Retry the firmware update process*2
Firmware update file error <ul style="list-style-type: none"> • CPU model type mismatch • Invalid firmware update file • Hardware version does not support update • Firmware update prohibited 	ERROR flashing	<ul style="list-style-type: none"> • Check the target CPU module and retry the firmware update process • Upload firmware update file to SD memory card again • Check if the firmware update file name has changed and ensure the original name is used • Confirm firmware update prohibition setting is not enabled preventing the update process
Firmware data error	READY and ERROR flashing	<ul style="list-style-type: none"> • Retry firmware update process*2

*1. To obtain the firmware update file, please contact your local Mitsubishi Electric sales office or representative.

*2. If an error continues to occur after retrying this maybe due to a hardware fault. For further details, please consult your local Mitsubishi Electric sales office or representative.

Relevant manual

Manual name	Manual number	Language
MELSEC iQ-R Module Configuration Manual	SH-081262ENG	English

Country/Region Sales Office
 USA +1-847-478-2100
 Mexico +52-55-3067-7500
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 Germany +49-2102-486-0
 UK +44-1707-28-8780
 Ireland +353-1-4198800
 Italy +39-039-60531
 Spain +34-935-65-3131
 France +33-1-55-68-55-68

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 Turkey +90-216-526-3990
 UAE +971-4-3724716
 South Africa +27-11-658-8100
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 Taiwan +886-2-2299-2499

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For safe use

• To use the products listed in this publication properly, always read the relevant manuals before use.

- 3 Confirm the current firmware version
 Check the firmware version using GX Works3. Navigate to Diagnostics>System Monitor and click the "Product Information List" button.

Product Information List						
	Network Information (Port 2)	IP Address (Port1 IPv4)	IP Address (Port2 IPv4)	Module Synchronous Status	Firmware Version	Production information
Basic-Power Supply	-	-	-	-	-	80632525C0010531
Basic-CPU	-	192.168.3.39	-	-	25	15862C23A0010151
Basic-I/O 0	-	-	-	-	-	-
Basic-I/O 1	-	-	-	-	-	-
Basic-I/O 2	-	-	-	-	-	-
Basic-I/O 3	-	-	-	-	-	-
Basic-I/O 4	-	-	-	-	-	-
Basic-I/O 5	-	-	-	-	-	-

Current firmware version

Precautions

- Do not turn off the system power while the firmware is updating (should this occur, re-initiate the firmware update process)
- Backup any user data including programs and device settings prior to updating the firmware (restoration of user data can be done after updating has been completed)

Modules supporting firmware update

Item	Model	Compatible firmware version
MELSEC iQ-R Series Programmable controller CPU	R04CPU R08CPU R16CPU R32CPU R120CPU	Version 23 or later

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