

## 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.

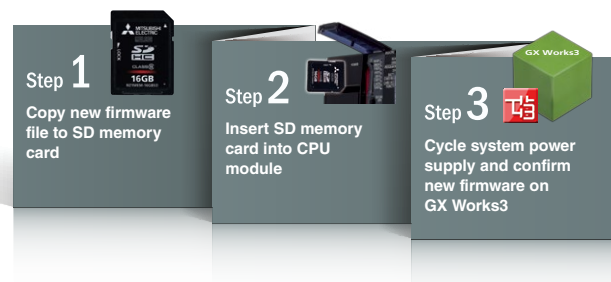
By utilizing the new module firmware update function, current modules can be updated to newer versions enabling support of newer features without the cost of replacing the module. The updating process is easy and quick, and requires no specialized software, reducing the amount of training required for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

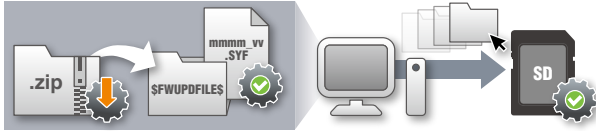
#### Easy three-step firmware updating

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

**R120CPU**  
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.

**R120CPU**  
READY  
ERROR  
PROGRAM RUN  
USER

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

**R120CPU**  
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 ERROR 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"> <li>• Retry the firmware update process*2</li> </ul>
Firmware update file error <ul style="list-style-type: none"> <li>• CPU model type mismatch</li> <li>• Invalid firmware update file</li> <li>• Hardware version does not support update</li> <li>• Firmware update prohibited</li> </ul>	 ERROR flashing	<ul style="list-style-type: none"> <li>• Check the target CPU module and retry the firmware update process</li> <li>• Upload firmware update file to SD memory card again</li> <li>• Check if the firmware update file name has changed and ensure the original name is used</li> <li>• Confirm firmware update prohibition setting is not enabled preventing the update process</li> </ul>
Firmware data error	 READY and ERROR flashing	<ul style="list-style-type: none"> <li>• Retry firmware update process*2</li> </ul>

\*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 ..... +52-55-3067-7512  
 Brazil ..... +55-11-4689-3000  
 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

Czech Republic ... +420-255-719-200  
 Poland ..... +48-12-347-65-00  
 Sweden ..... +46-8-625-10-00  
 Russia ..... +7-812-633-3497  
 Turkey ..... +90-216-526-3990  
 UAE ..... +971-4-3724716  
 South Africa ..... +27-11-658-8100  
 China ..... +86-21-2322-3030  
 Taiwan ..... +886-2-2299-2499

Korea ..... +82-2-3660-9569  
 Singapore ..... +65-6473-2308  
 Thailand ..... +66-2682-6522  
 Vietnam ..... +84-28-3910-5945  
 Indonesia ..... +62-21-31926461  
 India ..... +91-20-2710-2000  
 Australia ..... +61-2-9684-7777

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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 Synchronization Status	Firmware Version	Production information
Basic-Power Supply	-	-	-	-	-	00032525C0010531
Basic-CPU	-	192.168.3.39	-	-	25	16962C2A0010151
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	
		CPU part	Network part
MELSEC iQ-R Series Programmable controller CPU	R01CPU R02CPU	01 or later	-
	R04CPU R08CPU R16CPU	23 or later	-
	R04ENCPU R08ENCPU R16ENCPU	38 or later	32 or later

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