

MELSEC iQ-F FX5-SDCD Hardware Manual

Manual number	IB(NA)-0800672
Revision	A
Date	October 2021

This manual describes the part names, external dimensions, installation, and specifications of the product. Before using the product, read this manual and manuals of relevant products fully, and learn all the product information, safety information, and precautions to acquire proficiency in handling and operating the product.

Make sure that the end users read the manuals included with each product, and keep the manuals in a safe place for future reference.

Trademarks:

The company names, system names and product names mentioned in this manual are either registered trademarks or trademarks of their respective companies.

In some cases, trademark symbols such as "™" or "®" are not specified in this manual.

Published in October 2021 Specifications are subject to change without notice.

© 2021 MITSUBISHI ELECTRIC CORPORATION

SAFETY PRECAUTIONS

(Read these precautions before using the product.)

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

In this manual, the safety precautions are classified into two levels: "▲ WARNING" and "▲ CAUTION".

▲ WARNING Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.

▲ CAUTION Indicates that incorrect handling may cause hazardous conditions, resulting in minor or moderate injury or property damage.

Under some circumstances, failure to observe the precautions given under "▲ CAUTION" may lead to serious consequences.

Observe the precautions of both levels because they are important for personal and system safety.

Relevant manuals

Relevant manuals

Manual name	Manual number	Description
MELSEC iQ-F FX5S/FX5UJ/FX5U /FX5UC User's Manual (Hardware)	SH-082452ENG	Performance specifications, wiring, installation, and maintenance of hardware of the CPU module

How to obtain manuals

For the necessary product manuals or documents, consult with your local Mitsubishi Electric representative.

Standards

The FX5-SDCD is compliant with the EC Directive (CE marking) and UKCA marking. For details, refer to the following.

└─┘MELSEC iQ-F FX5S/FX5UJ/FX5U/FX5UC User's Manual (Hardware)

For the standards that relate to the CPU modules, refer to the product catalog or consult your local Mitsubishi representative.

Attention

This product is designed for use in industrial applications.

1. Overview

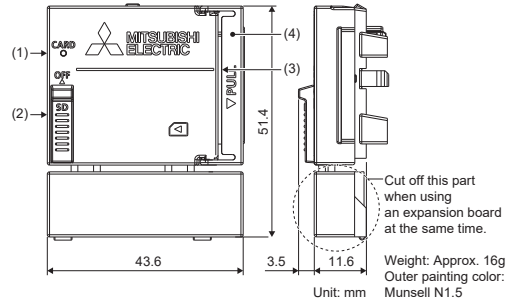
The FX5-SDCD SD memory card module is an expansion board equipped with the SD memory card slot for using an SD memory card with the FX5S CPU module.

1.1 Packing list

Check that the following items are included in the package.

Item	Quantity
Module	1
Hardware Manual (This manual)	1

1.2 External dimensions and part names



No.	Name	Color	Description
(1)	Operation status display LED (CARD LED)	Green	Turns on when SD memory cards can be used or cannot be removed. Flashes during preparation. Turns off when the slots are not in use or SD memory cards can be removed.
(2)	SD memory card disable switch ¹	ON (lower side): SD memory cards can be used. OFF (upper side): Access to the SD memory card is stopped (for removing it).	
(3)	SD memory card slot		
(4)	SD memory card slot cover		

¹ The switch is set to the ON position (lower side) in the figure.

2. Installation

[Installation Precautions]

▲ WARNING

- Make sure to cut off all phases of the power supply externally before attempting installation or wiring work. Failure to do so may cause electric shock or damage to the product.
- Use the product within the generic environment specifications described in the User's Manual (Hardware) for the CPU module used. Never use the product in areas with excessive dust, oily smoke, conductive dusts, corrosive gas (salt air, Cl₂, H₂S, SO₂ or NO₂), flammable gas, vibration or impacts, or expose it to high temperature, condensation, or rain and wind. If the product is used in such conditions, electric shock, fire, malfunctions, deterioration or damage may occur.

[Installation Precautions]

▲ CAUTION

- Do not directly touch any conductive parts of the product. Doing so can cause malfunction or failure of the product.
- Connect the expansion board and expansion adapter securely to their designated connectors. Poor contact may cause malfunction.
- When using an SD memory card, fully insert it into the SD memory card slot. Check that it is inserted completely. Poor contact may cause malfunction.

For details, refer to the following.

└─┘MELSEC iQ-F FX5S/FX5UJ/FX5U/FX5UC User's Manual (Hardware)

2.1 Insertion and removal of an SD memory card

For details on the insertion and removal of the SD memory card, refer to the following.

└─┘MELSEC iQ-F FX5S/FX5UJ/FX5U/FX5UC User's Manual (Hardware)

3. Specifications

[Startup and Maintenance Precautions]

▲ CAUTION

- Do not disassemble or modify the product. Doing so may cause fire, equipment failures, or malfunctions. For repair, contact your local Mitsubishi Electric representative.
- Do not drop or apply strong shock to the product. Doing so may cause damage.
- After the first use of the SD memory card, do not insert/remove the memory card more than 500 times. Exceeding the limit may cause malfunction.

[Disposal Precautions]

▲ CAUTION

- Please contact a certified electronic waste disposal company for the environmentally safe recycling and disposal of your device.

[Transportation Precautions]

▲ CAUTION

- The product is a precision instrument. During transportation, avoid impacts larger than those specified in the general specifications by using dedicated packaging boxes and shock-absorbing palettes. Failure to do so may cause failures in the product. After transportation, verify operation of the product and check for damage of the mounting part, etc.

3.1 Applicable CPU module

Model	Version
FX5S CPU module	From first product

3.2 SD memory card

Operational compatibility of the SD memory card (NZ1MEM-□GBSD), manufactured by Mitsubishi Electric, with the FX5-SDCD has been checked.

Use of SD memory cards other than the Mitsubishi Electric SD memory card may result in loss of the data stored in the SD memory card, or problems such as system stop.

For details on the SD memory card, refer to the following.

└─┘MELSEC iQ-F FX5S/FX5UJ/FX5U/FX5UC User's Manual (Hardware)

3.3 General specifications

The general specifications are equivalent to the CPU module. For the general specifications, refer to the following. However, since the product is not isolated between communication lines and the CPU module, please do not perform any dielectric withstand voltage tests or insulation resistance tests to the product.

└─┘MELSEC iQ-F FX5S/FX5UJ/FX5U/FX5UC User's Manual (Hardware)

This manual confers no industrial property rights or any rights of any other kind, nor does it confer any patent licenses. Mitsubishi Electric Corporation cannot be held responsible for any problems involving industrial property rights which may occur as a result of using the contents noted in this manual.

Warranty

Exclusion of loss in opportunity and secondary loss from warranty liability
Regardless of the gratis warranty term, Mitsubishi shall not be liable for compensation to:
(1) Damages caused by any cause found not to be the responsibility of Mitsubishi.
(2) Loss in opportunity, lost profits incurred to the user by Failures of Mitsubishi products.
(3) Special damages and secondary damages whether foreseeable or not, compensation for accidents, and compensation for damages to products other than Mitsubishi products.
(4) Replacement by the user, maintenance of on-site equipment, start-up test run and other tasks.

▲ For safe use

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric.
- This product has been manufactured under strict quality control. However when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.