

INSTRUCTION SHEET

MICROSmart

FC6A Series Bluetooth Communication Cartridge

This sheet provides brief operating instructions of the MICROSmart programmable controller.
For details, see the FC6A Series MICROSmart User's Manual.

Safety Precautions

Special expertise is required to use the MICROSmart.

- Read this instruction sheet and the user's manual to make sure of correct operation before starting installation, wiring, operation, maintenance, and inspection of the MICROSmart. Keep this instruction sheet where it can be accessed by the end user.
- All MICROSmart modules are manufactured under IDEC's rigorous quality control system, but users must add backup or failsafe provisions to control systems use the MICROSmart in applications where heavy damage or personal injury may be caused if the MICROSmart should fail.
- Install the MICROSmart according to the instructions described in this instruction sheet and the user's manual.
- Improper installation will result in falling, failure, or malfunction of the MICROSmart.
- Make sure that the operating conditions are as described in the user's manual.
- If you are uncertain about the specifications, contact IDEC before using the MICROSmart.
- In this instruction sheet, safety precautions are categorized in order of importance from Warning and Caution:

⚠ WARNING

Warning notices are used to emphasize that improper operation may cause severe personal injury or death.

⚠ CAUTION

Caution notices are used where inattention might cause personal injury or damage to equipment.

⚠ WARNING

- Turn off the power to the MICROSmart before starting installation, removal, wiring, maintenance, or inspection on the MICROSmart.
- Failure to turn off the power may cause electrical shocks or fire hazard. Emergency stop and interlocking circuits must be configured outside the MicroSmart.
- If such a circuit is configured inside the MICROSmart, failure of the MICROSmart may cause disorder of the control system, damage, or accidents.

⚠ CAUTION

- The MICROSmart is designed for installation in equipment.
Do not install the MICROSmart outside of equipment.
- Install the MICROSmart in environments as described in the user's manual.
If the MICROSmart is used in places where it is subjected to high-temperature, high-humidity, condensation, corrosive gases, excessive vibrations, or excessive shocks it will result in electrical shocks, fire hazard, or malfunction.
- The environment rating for using the MICROSmart is "Pollution degree 2."
- Prevent metal fragments and pieces of wire from dropping inside the MICROSmart housing. Ingress of such fragments and chips may cause fire hazard, damage, or malfunction.
- Do not disassemble, repair, or modify MICROSmart modules.

1 TYPE

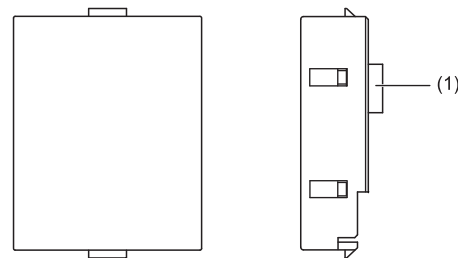
Bluetooth Communication Cartridge : FC6A-PC4

Applicable model

FC6A Series MICROSmart : CPU module
: Cartridge Base module
: HMI module *1

*1 Can not be used with the HMI module added to the All-in-one CPU module and the CAN J1939 All-in-one CPU module.

2 Parts Description



- (1) Connector
Connects to the cartridge slot 1 or 2 connector.
Connects to the cartridge slot 3 connector on the HMI module added to the Plus CPU module.

Bluetooth Communication

Part No.	FC6A-PC4
Bluetooth Standard	Bluetooth ver. 2.1+ EDR
Profile	SPP (Serial Port Profile) iAP (iPod Accessory Protocol)
Frequency Range	2,402 to 2,480 MHz
Wireless Transmission Distance *1	10m (Class 2)
Multi-point Function	8 units
Communication Protocol	Maintenance communication protocol User communication protocol
Bluetooth Wireless Approved Regions *2	Japan, People's Republic of China USA *3, Canada *4, Australia, New Zealand, Europe

*1 Connection effective range is affected by obstacles (human, metal, wall) and wave signal condition. Make sure to confirm the connection status before actual operation.

*2 Depending on countries or regions, evaluation on the device equipped with FC6A may be necessary.

*3 This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

*4 This device complies with Industry Canada license exempt RSS standard(s).

Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

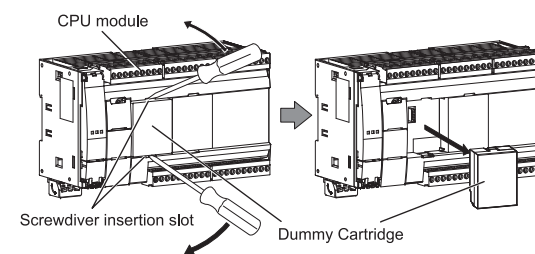
Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication. Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Note: Communication performance (required time) in maintenance communication is as follows.

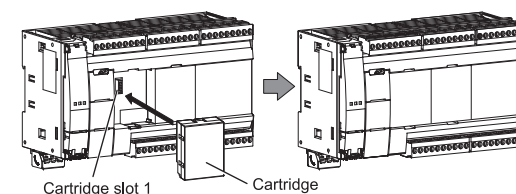
User program upload equivalent to 10,000 steps : 2 minutes 40 seconds approx.
User program download equivalent to 10,000 steps : 2 minutes 30 seconds approx.
User program upload equivalent to 20,000 steps : 5 minutes 20 seconds approx.
User program download equivalent to 20,000 steps : 5 minutes approx.
100KB CSV file retrieval : 1 minute 30 seconds approx.
200KB CSV file retrieval : 3 minutes approx.

3 Connecting Cartridge

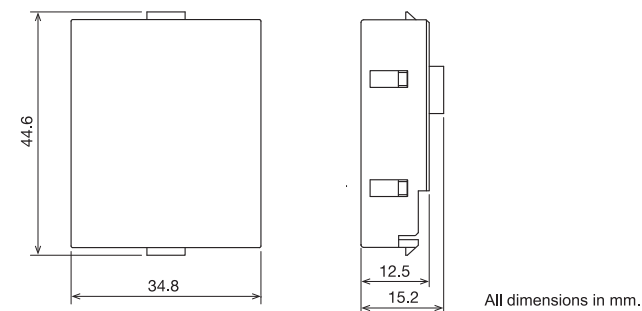
1. Insert flat head screwdrivers into the screwdriver insertion slots in both locations of the unit, and while pushing the tabs of the cartridge cover, pull the cartridge cover directly upward to remove it.



2. Pay careful attention to the direction of the cartridge and attach it directly onto the unit.



4 Dimensions



Made for

iPod iPhone iPad

"Made for iPod," "Made for iPhone," and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone, or iPad may affect wireless performance.

Applicable model :

iPhone 7 Plus , iPhone 7 , iPhone SE , iPhone 6s Plus , iPhone 6s , iPhone 6 Plus , iPhone 6 , iPhone 5s , iPhone 5c , iPhone 5 , iPhone 4s , iPad Pro(10.5-inch), iPad Pro(12.9-inch)2nd Generation , iPad Pro(12.9-inch)1st Generation , iPad Pro(9.7-inch), iPad mini 4 , iPad mini 3 , iPad mini 2 , iPad mini , iPad Air 2 , iPad Air , iPad(5th generation), iPad(4th generation), iPad(3rd generation), iPad 2 , iPod touch(6th generation), iPod touch(5th generation)

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MicroSmart User's manual can be downloaded from <http://www.idec.com/download>

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