Clock Cartridge

With the optional clock cartridge installed on any type of MicroSmart CPU modules, the MicroSmart can be used for time-scheduled control such as illumination and air conditioners. For setting the calendar/clock, see page 9-6 (Advanced Vol.).

Clock Cartridge Type Number

Module Name	Type No.
Clock Cartridge	FC4A-PT1

Clock Cartridge Specifications

Accuracy	±30 sec/month (typical) at 25°C
Backup Duration	Approx. 30 days (typical) at 25°C after backup battery fully charged
Battery	Lithium secondary battery
Charging Time	Approx. 10 hours for charging from 0% to 90% of full charge
Battery Life	Approx. 100 recharge cycles after discharging down to 10% of full charge
Replaceability	Not possible to replace battery

The optional memory cartridge (FC4A-PM32) and the clock cartridge cannot be used together on the all-in-one type CPU module. The memory cartridge and the clock cartridge can be used together on the slim type CPU module.

Installing and Removing the Clock Cartridge

Caution
Before installing or removing the clock cartridge, turn off the power to the MicroSmart CPU module. Otherwise, the clock cartridge or CPU module may be damaged, or the MicroSmart may not operate correctly.
After installing the clock cartridge, set the calendar/clock using WindLDR. If the calendar/clock is set before installing the clock cartridge, clock IC error occurs, turning on the ERR LED.

All-in-One Type CPU Module

The cartridge connector is normally closed with a dummy cartridge. To install the clock cartridge, open the terminal cover and remove the dummy cartridge from the CPU module. Make sure of correct orientation of the clock cartridge. Insert the clock cartridge into the cartridge connector until it bottoms. Do not insert the clock cartridge diagonally, otherwise the terminal pins will be deformed. After installing the clock cartridge, close the terminal cover.

To remove the clock cartridge, hold both edges of the clock cartridge and pull it out.

Slim Type CPU Module

To install the clock cartridge, open the hinged lid and remove the dummy cartridge from the CPU module. Make sure of correct orientation of the clock cartridge, and insert the clock cartridge into cartridge connector 1 or 2 until it bottoms. After installing the clock cartridge, close the hinged lid.

Only one clock cartridge can be installed to either cartridge connector 1 or 2 on the slim type CPU module. A clock cartridge and a memory cartridge can be installed at the same time.

To remove the clock cartridge, hold both edges of the clock cartridge and pull it out.



