

## High-reliability SD MEMORY CARD for FA Environment

- The SD Memory Card allows you to store various data in the OMRON FA Devices.
- The stored data can be shared with a personal computer through the card slot or the memory card reader/writer.



## Features

- High reliability and long service life design
- High-speed data transfer between OMRON FA Devices
- Usable with the NJ-series machine automation controllers \*

(The functions available with the SD Memory Card depend on the device on which it is mounted. For details, refer to the manuals for the device).

\* HMC-SD291 cannot be used for the NJ501-□□□□ hardware revision A/unit version 1.15 or later. All other CPU units are supported.

## Ordering Information

### International Standards

- The standards are abbreviated as follows: U: UL, U1: UL (Class I Division 2 Products for Hazardous Locations), C: CSA, UC: cULus, UC1: cULus (Class I Division 2 Products for Hazardous Locations), CU: cUL, N: NK, L: Lloyd, and CE: EC Directives.
- Contact your OMRON representative for further details and applicable conditions for these standards.

| Item           | Specifications   | Model     | Standards |
|----------------|------------------|-----------|-----------|
| SD Memory Card | Flash Memory 2GB | HMC-SD291 | N, L, CE  |
|                | Flash Memory 4GB | HMC-SD491 | CE        |

## General Specifications

| Item                          |                               | Specifications   |       |
|-------------------------------|-------------------------------|--|-------|
| Common specifications         | Capacity                      | 2GB  | 4GB   |
|                               | Dimensions                    | 32mm x 24mm x 2.1mm (H x W x D)  |       |
|                               | Weight                        | 2g max   |       |
|                               | Current consumption           | 200mA(3.3V) max *  |       |
|                               | Operating/storage environment | Ambient operating temperature: 0°C to 70°C /<br>Ambient operating humidity: 10% to 90% (no condensation) *<br>Ambient storage temperature: -20°C to 75°C /<br>Ambient storage humidity: 10% to 90% (no condensation) |       |
|                               | Write protection              | Provided   |       |
| Factory default specification | Type of file system           | FAT16  | FAT32 |

\* These values depend on the device on which the card is mounted. The value in the user's manual for the device takes priority if it is written.

## Write Protection

You will not be able to write to the SD Memory Card if the key is set to the LOCK position. (Use this setting to prevent overwriting.)



## Detecting SD Memory Card Life Expiration

You can detect the remaining life of the SD Memory Card used in a NJ-series Controller.

The remaining life can be notified with the following functions.

- System-defined variable \_Card1Deteriorated (SD Memory Card Life Warning Flag)
- SD Memory Card Life Exceeded (Observation) event

For details, refer to the NJ-series CPU Unit Hardware User's Manual (Cat. No. W500).

## Precautions for Correct Use

Read the following precautions carefully before using an SD Memory Card. For details, refer to user's manuals for the device on which the card is mounted.

### Formatting

The SD Memory Cards are formatted and shipped, so you do not need to format the card by yourself after purchasing.

To format the SD Memory Card after using, perform the formatting operation on the device on which the card is usually mounted.

### Service Life

The SD Memory Card uses flash memory, and so its service life is limited. When the end of the SD Memory Card's service life approaches, the ability to write data is lost, and data is sometimes not retained after writing. The service life depends on the size of the data that is written and on the ambient temperature. For the unlikely event that data is lost, it is recommended to periodically back up data.

### Installing and Removing

To install and remove the SD Memory Card, follow the user's manuals for the device on which the card is mounted.

Never remove the SD Memory Card while it is accessed. Otherwise the data may not be written correctly, or at worst, the card may no longer be usable.

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