# Option SD Memory Card HMC-SD291

# High-reliability and High-capacity SD MEMORY CARD for FA Environment

- The 2GB 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

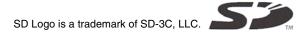
(The functions available with the SD Memory Card depend on the device on which it is mounted. For details, refer to the manuals for the device).

# **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 | _         |



# HMC-SD291

# **General Specifications**

| Item                          |                               | Specificatons   |
|-------------------------------|-------------------------------|---|
| Common<br>specifications      | Capacity                      | 2GB   |
|                               | Dimensions                    | $32mm \times 24mm \times 2.1mm (H \times W \times D)$   |
|                               | 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) <b>*</b><br>Ambient storage temperature: -20°C to 75°C /<br>Ambient storage humidity: 10% to 90% (no condensation) |
|                               | Write protection              | Provided  |
|                               | Number of overwrites          | 100,000 (guaranteed)  |
| Factory default specification | Type of file system           | FAT16   |

\* 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.)



# **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.

## Number of Overwrites

The SD Memory Card uses flash memory, and so its service life is limited (100,000 overwrites guaranteed). 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.

#### **Read and Understand This Catalog**

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

### Warranty and Limitations of Liability

#### WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

#### LIMITATIONS OF LIABILITY

OMRON SHALL NOT BE RESPONSIBLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY.

In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

### **Application Considerations**

#### SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- · Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this catalog.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- · Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

#### **PROGRAMMABLE PRODUCTS**

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

#### Disclaimers

#### CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

#### DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

#### PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

#### ERRORS AND OMISSIONS

The information in this document has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical, or proofreading errors, or omissions.

#### 2012.6

In the interest of product improvement, specifications are subject to change without notice.

## OMRON Corporation Industrial Automation Company