

## 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).

## 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 / Ambient operating humidity: 10% to 90% (no condensation) * Ambient storage temperature: -20°C to 75°C / 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.

## Terms and Conditions Agreement

### 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.

### Warranties.

(a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.

(b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.

Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses 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. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.

See <http://www.omron.com/global/> or contact your Omron representative for published information.

### Limitation on Liability; Etc.

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

Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

### Suitability of Use.

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

### Programmable Products.

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

### Performance Data.

Data presented in Omron Company websites, catalogs and other materials 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 user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

### 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 part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

### Errors and Omissions.

Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

2013.6

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

**OMRON Corporation**  
Industrial Automation Company

<http://www.ia.omron.com/>

(c)Copyright OMRON Corporation 2013 All Right Reserved.