# V720-Series Electromagnetic Inductive CF Card-type RFID Unit V720S-HMF01

### Omron's CF Card-type RFID Unit Connects to a Variety of PDAs (Personal Digital Assistant) and It's Compact Size Ensures Easy Portability for Use Virtually Anywhere

- Applies i-CODE1 chip and i-CODE SLI (ISO/IEC 15693) chip technology from Phillips Semiconductors.
- Readily available Windows CE based PDA interface: Compact Flash Type 2 (www.compactflash.org/).
- Highly versatile functions, such as Read/Write modes, in a compact size.
- Combining the V720S-HMF01 with a Windows CE based PDA costs much less than most hand-held RFID readers.



### **Ordering Information**

### **■** List of Models

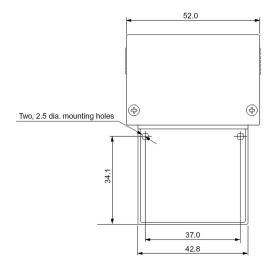
Item	Model
Compact flash card-type RFID unit	V720S-HMF01

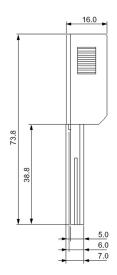
### **Specifications**

Item	Specifications
Communications frequency	13.56 MHz
Ambient temperature in operation	0°C to 50°C with no icing
Weight	Approx. 30g
Supply voltage	3.3 VDC ±5%
Antenna dimensions	52 W x 35 H x 16 D mm (The dimensions of the portion of the antenna extending from the PDA when the unit is mounited in the PDA)
Current consumption	Approx. 175 mA (oscillating), Approx. 100 mA (not oscillating)
Communications range	30 mm with V720-D52P40
Interface	Compact Flash Type 2 (9,600 bps)

### **Dimensions**

Note: All units are in millimeters unless otherwise indicated.





# **Communications Time (Reference Value)**

Command	i-CODE	i-CODE SLI
Read	T = 1.3 N + 6.2	T = 1.3 N + 6
Write	T = 13 N + 13.5	T = 13.6 N + 15.5

Note: 1. T = Communications Time (msec)

2. N = Number of pages (1 page is 4 bytes)

## **Communications Range**

# ■ Between V720S-HMF01 and i-CODE1 Tag Inlet

Tag inlet	Communications range (see note)
V720-D52P01	45 mm
V720-D52P02	45 mm
V720-D52P03	3 to 14 mm
V720-D52P04	3 to 15 mm

# ■ Between V720S-HMF01 and i-CODE SLI Tag Inlet

Tag inlet	Communications range (see note)
V720S-D13P01	45 mm
V720S-D13P02	45 mm

**Note:** The communications range depends on the environmental conditions, such as temperature, humidity, electronic noise, etc.

### **Terms and Conditions**

# WARRANTY, 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 IT 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 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 which apply to the combination of the product in the customer's application or use of the product.

At the customer'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

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 this product, nor is it intended to imply that the uses listed may be suitable for this product:

- 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 this product.

NEVER USE THE PRODUCT 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 PRODUCT IS 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**

**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 user must correlate it to actual application requirements. Actual performance is subject to the OMRON 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 representative at any time to confirm actual specifications of purchased product.

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

Complete terms and conditions for product purchase and use are on Omron's website at www.omron.com/oei – under the "About Us" tab, in the Legal Matters section.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters into inches, divide by 25.4

# OMRON

**OMRON ELECTRONICS LLC** 

One Commerce Drive Schaumburg, IL 60173

847-843-7900

For US technical support or other inquiries:

800-556-6766

OMRON CANADA, INC. 885 Milner Avenue

Toronto, Ontario M1B 5V8

416-286-6465

#### **OMRON ON-LINE**

Global - http://www.omron.com USA - http://www.omron.com/oei Canada - http://www.omron.ca

Cat. No. GC RFID 4

5/03

Specifications subject to change without notice

Printed in USA