

OMRON

Model V680-HS63-SP

ID System Antenna

INSTRUCTION SHEET

Thank you for selecting OMRON product. This sheet primarily describes precautions required in installing and operating the product. Before operating the product, read the sheet thoroughly to acquire sufficient knowledge of the product. For your convenience, keep the sheet at your disposal.

TRACEABILITY INFORMATION:

Importer in EU: OMRON Europe B.V. Wegalaan 67-69 2132 JD Hoofddorp The Netherlands
Manufacturer: OMRON Corporation, Shiokoji Horikawa, Shimogyo-ku, Kyoto. 600-8530 JAPAN



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Precautions for Correct Use

1. Installation and Storage Location

Do not install and storage the product in the following locations:

- Locations subject to corrosive gases, dust, dirt, metal powder, or salt
- Locations where the specified ambient operating temperature range is exceeded
- Locations subject to extreme temperature changes that may result in condensation
- Locations where the specified ambient operating humidity range is exceeded
- Locations subject to contact with water, oil, or chemicals

2. Installation

•The product uses the 13.56 MHz frequency band to communicate with Tags. Some devices, such as some transceivers, motors, inverters, and switch mode power supplies, generate electromagnetic waves (i.e., noise) that can affect communications with the Tags. If any of these devices are nearby, communications with Tags may be affected or Data Carriers may be destroyed. If the product is to be used near such devices, check the effects on communications before using the product.
•To minimize the general influence of noise, follow the following precautions:

- (1) Ground the earth terminal of this product and any metallic material located around the product to 100 Ω or less.
- (2) Keep product wiring away from high voltage or heavy current.

•The product does not provide a water-proof structure. Do not use it where mists are present.

•Do not use chemicals that will affect product materials.

•Tighten the screws to a torque of 1.2 N·m when mounting the product.

•Do not pull the Antenna connector over the power of 30 N. The Antenna connector may be broken.

•If multiple Antennas are mounted near each other, communications performance may decrease due to mutual interference. Refer to Installing Antennas in the V680 Series User's Manual for Amplifiers, Antennas, and ID Tags (Cat. No. Z262, Z248) and check to make sure there is no mutual interference.

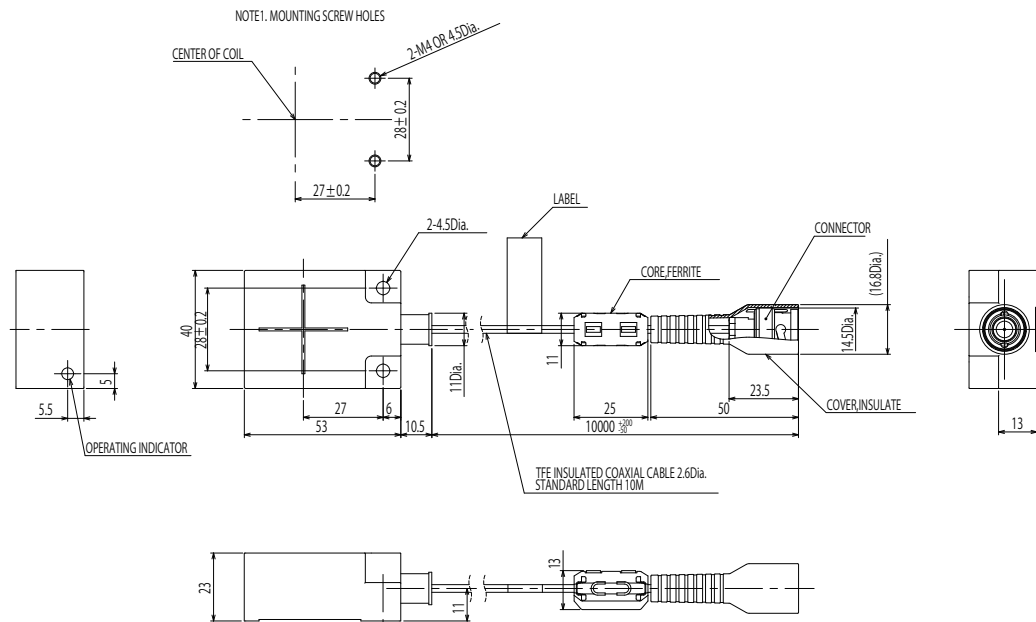
3. Cleaning

•Do not use thinners for cleaning. Resin materials and the case coating will be dissolved by thinners.

European RE Directive (2014/53/EU)

•An RFID reader/writer or amplifier unit connected to this antenna is accompanied by a copy of the EU declaration of conformity.

Dimension



Specifications

General Specifications

Item	Specifications
Oscillating frequency	13.56MHz
Ambient operating temperature	-10 to 60°C (no freezing)
Ambient operating humidity	35 to 95%RH(no condensation)
Ambient storage temperature	-25 to 75°C (no freezing)
Ambient storage humidity	35 to 95%RH(no condensation)

Performance Specifications

Item	Specifications
Insulation resistance	20 MΩ min. between cable terminal and casing (with 500 VDC mega)
Dielectric strength	By applying 1000 VAC, 50/60 Hz power for 1minute between cable terminal and casing
Vibration resistance	Durable at 10 to 500 Hz Double amplitude less than 1.5 mm 10 sweeps for 11 minutes each in 3 directions
Shock resistance	Durable at 500m/s ² , 3 times In 6 directions
Enclosure rating	IP67(IEC60529)(Antenna) NOTE:The connector is not a waterproof specification.
Dimensions	45 × 53 × 23 mm (excluding protruding parts)
Material	Casing: Fluoroplastics(PTFE) Fill resin: Epoxy resin Cable: Fluoroplastics(FEP)
Weight	Approx. 270 g
Mounting method	M4 screws
Cable length	10 m

Suitability for 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 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.

OMRON Corporation Industrial Automation Company
Kyoto, JAPAN Contact: www.ia.omron.com

Regional Headquarters

- **OMRON EUROPE B.V.**
Wegalaan 67-69, 2132 JD Hoofddorp
The Netherlands
Tel: (31)2356-81-300/Fax: (31)2356-81-388
- **OMRON ELECTRONICS LLC**
2895 Greenspoint Parkway, Suite 200
Hoffman Estates, IL 60169 U.S.A.
Tel: (1) 847-843-7900/Fax: (1) 847-843-7787
- **OMRON ASIA PACIFIC PTE. LTD.**
No. 438A Alexandra Road # 05-05/08 (Lobby 2),
Alexandra Technopark,
Singapore 119967
Tel: (65) 6835-3011/Fax: (65) 6835-2711

- **OMRON (CHINA) CO., LTD.**
Room 2211, Bank of China Tower,
200 Yin Cheng Zhong Road,
PuDong New Area, Shanghai, 200120, China
Tel: (86) 21-5037-2222/Fax: (86) 21-5037-2200

Observe the following precautions to ensure safe usage of the product.

1. Do not use the product in environments subject to inflammable, explosive, or corrosive gases.
2. Do not disassemble, repair, or modify the product in any way.
3. Tighten mounting screws securely.
4. Because a cable has a locking mechanism, make sure that it has been locked before using the cable.
5. Always turn OFF the power supply to the ID Controller before attaching or removing the Antenna.
6. If you suspect that anything is wrong with the product at any time, stop using it immediately, turn OFF the power supply, and consult with your OMRON representative.
7. When disposing of the product, dispose of it as industrial waste.
8. Be sure to follow any other warnings, cautions, and notices given in this manual.

Precautions for Safe Use