

V740 Series RFID System- Specifications

The V740 Series RFID system is ideally suited for materials handling, logistics, retail, and supply chain management on a global scale. Trust OMRON a global leader with over 20 years experience to help your company save time and money by improving forecasting, distribution and production.

maximize inventory

effective supply chain

track goods quickly

maximize supply

no line-of-sight
required

increase efficiency





EPCglobal Compliance

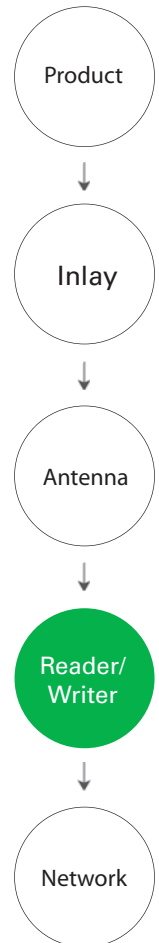
Compliance with the EPCglobal Protocols Class 0 & Class1, and also upgradeable to Class1 G2 by changing firmware.

High Speed Data Processing

High speed data processing by Intel network processor and PC-like function by Linux OS enabling to run application software on the product.

Features

The reader/writer is well suited for system integrators and corporate developers who require standard-based, scaleable solutions supported by a robust development environment using off-the-shelf tools.



V740 Inlay General Specifications

	V740-BC50C02-US	V740-BC50C04-US (planned)
Operating Frequencies	902 - 928 MHz	902 - 928 MHz
Supported Protocols		
EPC Class 0	Available	Available
EPC Class 1	Available	Available
EPC C1G2	Upgradeable	Upgradeable
Number of Antenna Ports	2	4
Interface Port	Ethernet	Ethernet
Supplied Voltage by AC Adapter	24VDC, 2.0A	24VDC, 2.0A
Power Supply	100 - 240VAC, 50/60Hz	00 - 240VAC, 50/60Hz
Operating Temperature	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
Storage Temperature	-20°C to 65°C (-4°F to 149°F)	20°C to 65°C (-4°F to 149°F)
Operating Humidity	25% to 85% RH (non-condensing)	25% to 85% RH (non-condensing)
Protective Rating	IP40	IP40
Regulatory Compliance	FCC Part 15, CSA	FCC Part 15, CSA
Dimensions	306.0 x 269.1 x 41.1mm (12.05" x 10.59" x 1.62")	306.0 x 269.1 x 41.1mm (12.05" x 10.59" x 1.62")
Weight	1.5kg (3.4lbs)	1.5kg (3.4lbs)

This product is only sold in the U.S.A. at present.



Compact size

Featuring Dual-element antenna and compact size.

General Specifications

Item	Specifications
Operating Frequencies	902 – 928 MHz
Impedance	50 ohm
Operating Temperature	-10°C to 55°C (14°F to 131°F)
Storage Temperature	-20°C to 65°C (-4°F to 149°F)
Operating Humidity	25% to 85% RH (non-condensing)
Protective Rating	IP50
Dimensions	496 x 221 x 69 mm (19.5" x 8.7" x 2.7")
Weight	1.5kg (3.4 lbs)



High Quality Product

Patented “Ultrasonic Bonding” technology is applied for the chip mounting.
Omron’s inlay is strong against bending stress and has a lower deficit rate.

Inlay Class

EPCglobal compliant.

EPCglobal protocol Class 1 (96bits).

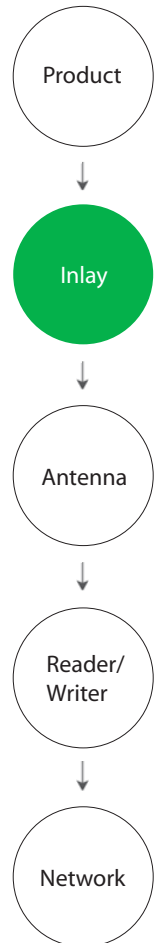
C1G2 (Generation 2) will be commercialized when the C1G2 chip is released.

Thinness and Flexibility

Thickness of antenna is 9μm with tension of 7.5N at ø20mm iron stick.
These characteristics make inlay conversion easy.

V740 Inlay General Specifications

Size	16 mm x 94 mm (0.63" x 3.70")
Operating Frequency	915 MHz
Protocol	EPCglobal Protocol Class 1 (96 bits)
Memory Size	128 bits EEPROM (User memory area: 96 bits)
Data Retention	Time 10 years
Data Write Endurance	10,000 cycles
Operating Temperature	-20°C to 55°C (-4°F to 131°F) (no icing, no condensation)
Storage Temperature	-20°C to 55°C (-4°F to 131°F) (no icing, no condensation)
Storage Humidity	60% RH max.
Heat Resistance	No communication error after 250 hours at 85°C (185°F)
Cold Resistance	No communication error after 250 hours at -30°C (-22°F)
Thermal Shock Resistance	No communication error after 100 cycles between 85°C (185°F) and -30°C (22°F) holding 30 minutes at each temperature.
Vibration Resistance	Destruction: 10 to 2,000 Hz, 1.5 mm (0.06 in) double amplitude at 150 m/s ² (492.1 ft/s ²) in X, Y, and Z directions 10 times each for 11 minutes
Shock Resistance	Destruction: 500 m/s ² (1640 ft/s ²) three times each in X, Y, and Z directions

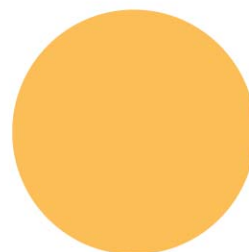
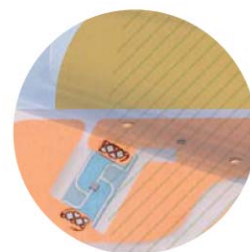
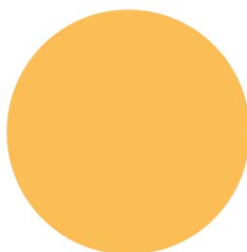
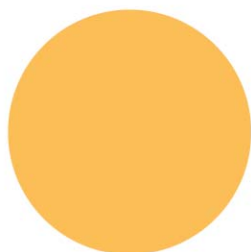
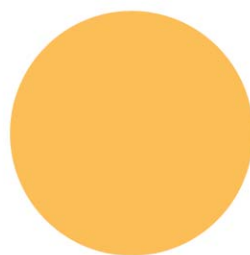
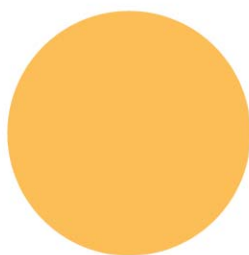
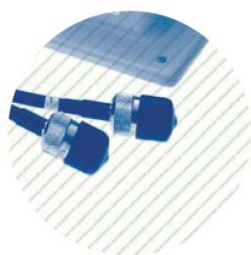


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For further information on OMRON's RFID systems, and the V740 Series visit our website at www.rfid.omron.com.

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