



**OMNEX**  
TRUSTED WIRELESS

**OMNEX Control Systems Inc.**

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Port Coquitlam, BC Canada V3C 6G5

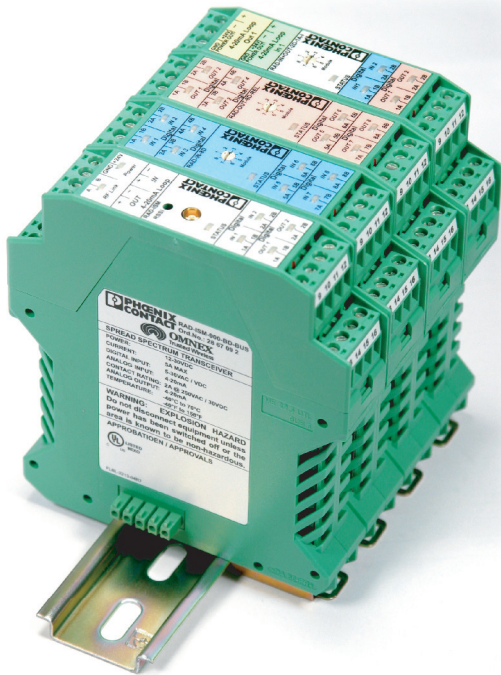
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## RAD-ISM-900-SET-BD-BUS System

# Two-way Monitoring & Control with Expandable I/O Options



The RAD-ISM-900-SET-BD-BUS is an integrated radio & I/O module designed for bi-directional interfacing of multiple 4-20mA current loop and digital signals in harsh industrial environments. This unique design enables the user to add multiple channels of I/O to paired transceivers in combinations. The design is ideal for moving numerous signals through high interference environments without costly cable and conduit runs.

### OMNEX Industrial Wireless is:

Reliable

Cost Effective

License Free

Interference Free (FHSS)

Maintenance Free

Easy to Use

### OMNEX will save you money by:

Eliminating Cable, Conduit & Pendants

Eliminating Permits, Delays & Labor

Restarting Stalled Projects

Increasing Monitoring/Control Accuracy

### FEATURES

- Modular DIN-rail mount transceiver and I/O
- No programming required
- Class I, Div 2 UL approved
- Up to eight expandable I/O modules per transceiver on common power and communications bus with multiple combinations
- Maximum 33 analog or 66 digital signals in one direction
- Dry contact LINK diagnostic output

### APPLICATIONS

- SCADA Systems • Tank Level/Pressure/ Temperature Monitoring • Petro-Chem
- PLC/RTU extensions • Pump Control
- Water/wastewater

**Industrial Wireless Solutions**

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## RAD-ISM-900-SET-BD-BUS System

### Two Way Monitoring & Control with Expandable I/O Options

Transmit Power	1 watt
Range	600-1000 feet (180m-300m) in plant, no line-of-sight 4-5 miles (6-8km), line-of-sight, flat terrain, raised antennas 20+ miles (30km +), line-of-sight, flat terrain, professional propagation study, installation and directional antennas
Frequency	902 to 928MHz - ISM band 2.4 - 2.483GHz (DIN-rail mounted RAD-ISM-2400-SET-BD-BUS)
Power Source	9 to 30VDC (regulated)
Power Consumption	75mA @ 24VDC (average) 200mA @ 24VDC (peak)
Inputs	1 x 4-20mA analog (16-bit resolution; 125 ohms impedance) 2 digital (5 - 36VDC/AC)
Outputs	1 x 4-20mA analog (16-bit resolution; short-circuited protected) 2 digital (dry contact, Normally Open (NO), contact rating: 250VAC/2A)
I/O Expansion	Eight analog and/or digital I/O modules per transceiver station
Output Repeatability	0.02%
Output Accuracy	0.2% of full scale @ 77 °F (25 °C)
<b>General Specifications</b>	
Temperature Range	-40 °F to 158 °F (-40 °C to 70 °C)
Dimensions	4.5" x 3.9" x .9" (114mm x 99mm x 22.5mm)
Approvals	USA - FCC Part 15.247 Canada - ISC RSS 210 UL listed (Class I Div. 2, Groups A, B, C, & D)

### RAD-ISM-900-SET-BD-BUS base system includes the following items:

- two RAD-ISM-900-BD-BUS transceiver modules
- two 3.25" whip antennas, each with 6' of RG174 cable an "L" bracket for mounting inside or outside a cabinet

### Ordering Information

Part Description	Part Number
RAD-ISM-900-SET-BD-BUS Transceiver Set	28 67 089
RAD-ISM-900-BD-BUS Spare Repeater Transceiver	28 67 092
<b>Expandable I/O Options</b>	
Analog Input Module RAD-IN-4A-I	28 67 115
Analog Output Module RAD-OUT-4A-I	28 67 128
Digital Input Module RAD-IN-8D	28 67 144
Digital Output Module RAD-OUT-8D-REL	28 67 157
Combination Module RAD-IN+OUT-2D-1A-I	28 67 322

Specifications subject to change without notice

Manufactured by



**OMNEX**  
TRUSTED WIRELESS

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INNOVATION IN INTERFACE

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