

Wireless module - RAD-ISM-900-RX - 2867047

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Receiver to expand point-to-multipoint connections, for unidirectional wireless 900 MHz transmission system (America)

Your advantages

- ✓ The transmitter can be installed on a DIN rail or outdoors (IP65)
- ✓ Two pre-programmed transceivers that automatically communicate with each other
- ✓ Operates in the license-free 902 - 928 MHz ISM band
- ✓ Frequency hopping spread spectrum
- ✓ Two omnidirectional antennas
- ✓ The receiver for DIN rail mounting is supplied with 24 V DC
- ✓ Conducted transmitters can either be supplied with 24 V DC or 120/240 V AC



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	294.000 g
Custom tariff number	85176990
Country of origin	Canada

Technical data

Note

Trade restriction	The products are offered exclusively for export outside the EU and the European Economic Area.
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Dimensions

Width	17.5 mm
Height	99 mm
Depth	114.5 mm

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Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	IP20

Wireless set

Set contents	Receiver
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Analog output (receiver)

Output name	Current output
Current output signal	4 mA ... 20 mA
Load/output load current output	700 Ω (at $U_B = 24 \text{ V}$, $R_B = [U_B - 10 \text{ V}] / 20 \text{ mA}$)

Digital output (receiver)

Output name	2 x relay output + 1 x RF link
Contact type	3 floating PDT contacts
Contact material	Ag, gold-plated
Maximum switching voltage	30 V DC
	120 V AC
Limiting continuous current	0.5 A
Mechanical service life	1x 10 ⁷
Service life, electrical	8x 10 ⁵ cycles at a switching current of 0.5 A

Supply (receiver)

Supply voltage	24 V DC (at U_B)
Supply voltage range	12 V DC ... 30 V DC
Typical current consumption	85 mA
Max. current consumption	125 mA

General

Mounting position	any
Assembly instructions	on standard DIN rail NS 35 in accordance with EN 60715
Housing material	Polyamide PA non-reinforced

Connection data

Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14

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Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3

Standards and Regulations

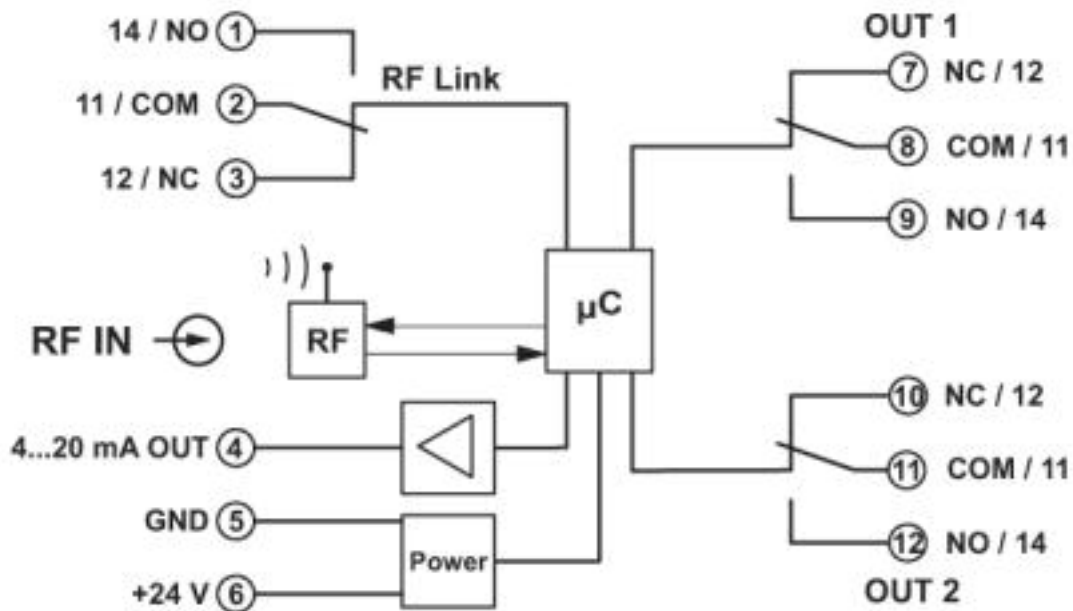
Electromagnetic compatibility	FCC Part 15.247 / ISC RSS 210
Conformance	FCC Directive, Part 15.247
	ISC Directive RSS 210
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Block diagram



Receiver module

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Classifications

eCl@ss

eCl@ss 4.0	27250312
eCl@ss 4.1	27250312
eCl@ss 5.0	27242208
eCl@ss 5.1	27242200
eCl@ss 6.0	19179200
eCl@ss 7.0	19179290
eCl@ss 8.0	19179290
eCl@ss 9.0	19179290

ETIM

ETIM 2.0	EC000310
ETIM 3.0	EC000310
ETIM 4.0	EC000310
ETIM 5.0	EC000310
ETIM 6.0	EC000310
ETIM 7.0	EC000310

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	43223108
UNSPSC 11	39121008
UNSPSC 12.01	43223108
UNSPSC 13.2	43222604

Accessories

Accessories

Adapter cable

Antenna cable - RAD-CON-MCX-N-SB - 2867717

Antenna cable, outside diameter: 2.5 mm (0.1 in.), inner conductor: stranded, attenuation: 0.9 dB at 900 MHz, connection: MCX (male) -> N (female), cable length: 1.2 m (4 ft.)



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Accessories

Antenna cable - RAD-CON-SMA-N-SS - 2867403



Antenna cable, outside diameter: 2.5 mm (0.1 in.), inner conductor: stranded, attenuation: 0.9 dB at 900 MHz, connection: SMA (male) -> N (male), cable length: 1.2 m (4 ft.)

Antenna cable - RAD-CON-MCX-MCX-SS - 2867607



Antenna cable, outside diameter: 2.8 mm (0.11 in.), inner conductor: stranded, attenuation: 0.9 dB at 900 MHz, connection: MCX (male) -> MCX (male), cable length: 0.3 m (1 ft.)

Antenna cable - RAD-CON-MCX90-N-SS - 2885207



Antenna cable, outside diameter: 2.5 mm (0.1 in.), inner conductor: stranded, attenuation: 0.9 dB at 900 MHz, connection: 90° MCX (male) -> N (male), cable length: 1.2 m (4 ft.)

Antenna cable - RAD-CON-MCX-RPSMA-EX - 2885621



Antenna barrier, installation: Class I, Div. 1, Grps. A, B, C, D; Class II, Div. 1, Grps. F, G, frequency range: 0.3G Hz ... 6 GHz, connection: RSMA (male) -> MCX (male), incl. 0.7 m / 2.3 ft. connection cable, UL HazLoc approval

Antenna

Antenna - RAD-ISM-900-ANT-OMNI-5 - 2867199



Omnidirectional antenna, 900 MHz, gain: 7 dBi, polarization: linear, opening angle: h/v 360°/30°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips

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Accessories

Antenna - RAD-ISM-900-ANT-OMNI-FG-3-N - 2867791

Omnidirectional antenna, 900 MHz, gain: 5 dBi, polarization: linear, opening angle: h/v 360°/28°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips



Antenna - RAD-ISM-900-ANT-YAGI-3-N - 2867801

Directional antenna, 868 MHz / 900 MHz, gain: 5 dBi, polarization: linear, opening angle: h/v 168°/78°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips



Antenna - RAD-ISM-900-ANT-YAGI-6.5-N - 2867814

Directional antenna, 868 MHz / 900 MHz, gain: 8.5 dBi, polarization: linear, opening angle: h/v 100°/62°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips



Antenna - RAD-ISM-900-ANT-YAGI-6.5-25-AS - 2867827

Panel antenna with surge protection, adapter cable MCX->N and assembly material, IP65 protection, gain 8.5 dBi, cable length 7.6 m, connection N (female)



Antenna - RAD-ISM-900-ANT-YAGI-6.5-50-AS - 2867830

Panel antenna with surge protection, adapter cable MCX->N and assembly material, IP65 protection, gain 8.5 dBi, cable length 15.2 m, connection N (female)



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Accessories

Antenna - RAD-ISM-900-ANT-OMNI-0-6 - 2867160



Omnidirectional antenna, 900 MHz, gain: 2 dBi, polarization: linear, opening angle: h 360°, degree of protection: IP65, connection: MCX (male), incl. 2 m / 6.5 ft. connecting cable and mounting bracket for wall mounting

Antenna - RAD-ISM-900-ANT-OMNI-FG-6-N - 2885579



Omnidirectional antenna, 900 MHz, gain: 8 dBi, polarization: linear, opening angle: h/v 360°/15°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips

Coaxial adapter

Antenna splitter - RAD-ISM-900-ANT-4 - 2867050



4-way distributor for antenna signals (antenna splitter), MCX connection (female)

Coaxial cable

Antenna cable - RAD-CAB-RG58-10 - 2867364



Antenna extension cable, length: 10 ft

Antenna cable - RAD-CAB-RG58-20 - 2867212



Antenna extension cable, length: 20 ft

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Accessories

Antenna cable - RAD-CAB-RG213-25 - 2867597



Antenna extension cable, length: 25 ft

Antenna cable - RAD-CAB-RG213-40 - 2867377



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: solid, attenuation: 2.9 dB at 900 MHz, connection: 2 x N (male), cable length: 12 m (40 ft.)

Antenna cable - RAD-CAB-RG213-50 - 2867225



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: solid, attenuation: 3.5 dB at 900 MHz, connection: 2 x N (male), cable length: 15 m (50 ft.)

Antenna cable - RAD-CAB-PFP400-60 - 2867380



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: solid, attenuation: 2.5 / 4.2 / 6.3 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2x N (male), cable length: 18 m (60 ft.)

Antenna cable - RAD-CAB-PFP400-80 - 2867393



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: solid, attenuation: 3.3 / 5.6 / 8.4 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2x N (male), cable length: 24 m (80 ft.)

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Accessories

Antenna cable - RAD-CAB-PFP400-100 - 2867238



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: solid, attenuation: 4.1 / 6.9 / 10.4 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2x N (male), cable length: 30 m (100 ft.)

Antenna cable - RAD-CAB-LMR600-125 - 2885210



Antenna extension cable, length: 125 ft

Antenna cable - RAD-CAB-PFP600-150 - 2885184



Antenna cable, outside diameter: 15 mm (0.6 in.), inner conductor: solid, attenuation: 3.9 / 6.8 / 10.4 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2x N (male), cable length: 45 m (150 ft.)

Antenna cable - RAD-CAB-PFP900-200 - 2885197



Antenna extension cable, length: 200 ft