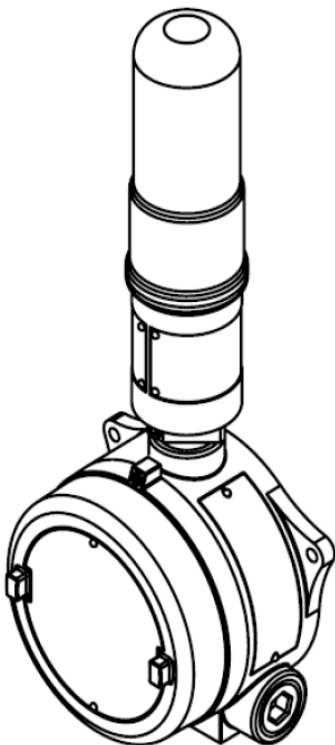




Model RXT-320

SmartWireless® Transceiver



Detcon Model Series RXT-320 SmartWireless® transceivers are ideal for transmitting signal data in a wide range of industrial detection and alarm system applications. The transceiver operates at a universally accepted frequency of 2.4 GHz and is able to transmit signal data from 4-20 mA DC or serial MODBUS inputs. Wireless installations eliminate the cost of point-to-point wiring and can be as simple as a single field device communicating with a controller, or as complex as 32 field device nodes forming a seamless network with a controller, remote display, and audio/visual alarm stations.

Wireless network integrity, security, and reliability are accomplished using direct sequence spread spectrum wireless mesh technology. Every device in the network is capable of functioning as a router and repeater for all other devices in the network. This means that subscribers can "hop" through neighboring devices to communicate with each other, thus widening network access points. This innovative technology creates a robust network that automatically routes around congestion and RF line-of-sight obstacles. Throughput improves as device density increases.

Features

- Universally Acceptable Frequency 2.4 GHz
- Low Power Requirement
- 1 Mile Line-of-Sight Range
- Robust Mesh Network Topology
- Network Capacity up to 32 Devices
- Flexible I/O options

Applications

- Oil and Gas Drilling Rigs
- Oil and Gas Production Sites
- Wastewater Treatment Plants
- Food and Beverage Processing
- Pulp and Paper Mills
- Refining and Petrochemical



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System Specifications

Input/Output	Two Analog 4-20mA RS-485 Modbus™ RTU (9600bps)
Outputs	Four Open Collector Outputs
Channel Capacity	32
Safety Approvals	cETLus Class I, Division 1, Groups C, D
Warranty	One Year

Electrical Specifications

Power Input	7-30 VDC
Power Consumption	Base RXT-320 unit: <500mW, 20 mA max at 24VDC Total Power is dependent on com update rate between RXT transceivers
Baud Rate	9600 BPS (9600,N,8,1 Half Duplex)
RF	Outdoor RF Line of Sight (with standard antenna): 1.5 Miles Interface Data Rate: 9,600bps Throughput Data Rate: 19,200bps RF Data Rate: 250,000bps Transceiver Sensitivity: -102dBm Frequency: 2.40-2.48GHz RF Channels: 16, each 5Mz Wide Output Power: 63mW (18dBm) EIRP Spread Spectrum: DSSS (Direct Sequence Spread Spectrum) Modulation: O-QPSK Supported Network Topologies: Mesh, Point-to-Point Encryption: AES-128 Available
Antenna	Connector: Internal F-Type Antenna Impedance: N/A
I/O Protection	Over-voltage, Miswiring, EMI/RFI Immunity

Environmental Specifications

Operating Temperature Range	-40C to +75C (-40F to +167F)
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Mechanical Specifications

Size	8.4"H x 2.4"Dia.; 213mmH x 61 mm Dia. (transceiver only) 15.7"H x 10"W x 4.3"D; 399mmH x 254mmW x 109mmD (with J-Box) 15.7"H x 10"W x 8"D; 399mmH x 254mmW x 203mmD (with J-Box & battery)
Weight	2 lbs/0.90 kilograms (transceiver only) 8 lbs/3.62 kilograms (with aluminum J-box) 11 lbs/4.98 kilograms (with SS J-box) 10 lbs/4.53 kilograms (with aluminum J-box & battery) 13 lbs/5.89 kilograms (with SS J-box & battery)

Specifications subject to change without notice

Model RXT-320

SmartWireless® Transceiver

Order Guide

Part Number	Description
976-000320-000	Model RXT-320 Wireless Transceiver
976-000321-000	Model RXT-320 w/Aluminum J-Box & Terminal Board
976-000322-000	Model RXT-320 w/Stainless Steel J-Box & Terminal Board
976-000327-100	Model RXT-320 w/Extended lid aluminum junction box and high output smart battery pack

Specifications subject to change without notice

We are committed to ensuring the quality and continuous improvement of our products. The information contained in this brochure is therefore subject to change without notice, only the technical data contained in the manual is binding. For more information, please contact us or our distributor.



AMERICAS
14880 Skinner Rd
Cypress, TX 77429
USA
Tel.: +1 713-559-9200

EMEA
ZI Est, Rue Orfila,
CS 20417
62027 ARRAS CEDEX, France
Tel.: +33-3-21-60-80-80
Fax.: +33-3-21-60-80-00

ASIA PACIFIC
Room 04, 9th Floor
275 Ruiping Road
Xuhui District, Shanghai, China
Tel.: + 86-134 8229 505
TGFD_APAC@teledyne.com