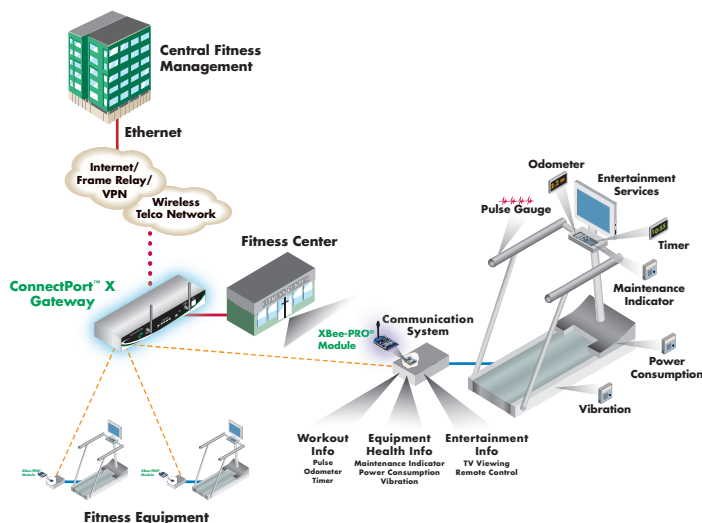
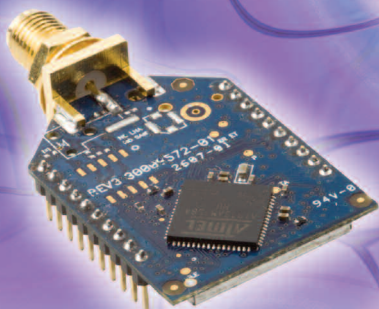


XBee-PRO 900 modules deliver 900 MHz extended-range end-point connectivity using a fast point-to-multipoint protocol.



## Features/Benefits

- 1.8 miles/3 km RF LOS range with 2.1 dB dipole antenna
- 6 miles/10 km RF LOS range with high-gain antenna
- Fast 156 Kbps data rate to the end node
- Supports sleep modes for increased battery life
- Capable of deploying the DigiMesh protocol with a simple firmware change
- Over-the-air configuration
- Interoperable with Digi Drop-in Networking products utilizing XBee-PRO 900 technology, including device adapters and gateways
- Common XBee footprint for a variety of RF modules
- Multiple antenna options
- Industrial temperature rating (-40° C to +85° C)

## Overview

XBee-PRO 900 embedded RF modules combine fast point-to-multipoint networking with the RF range advantages of 900 MHz technology. Built upon a 156 Kbps RF platform, these modules are ideal for applications requiring low latency and increased data throughput. With RF line-of-sight (LOS) distances of up to six miles with a high gain antenna, XBee-PRO 900 embedded RF modules are also ideal in applications where devices are distributed over great distances.

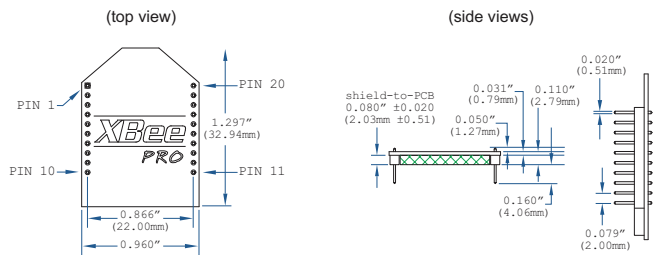
### XBee Protocols

XBee embedded RF modules are available with different protocols to suit a variety of applications and networking topologies. Supported protocols include IEEE 802.15.4, the ZigBee PRO Feature Set, proprietary long range, and DigiMesh™. XBee modules share a common hardware footprint and are modeled after a common software API. Once deployed into an application, OEMs can rapidly change from one protocol to another with minimal time and development risk.

### Drop-in Networking Compatibility

XBee embedded RF modules are compatible with Digi's Drop-in Networking adapters, network extenders and gateways that use the same protocol. This allows OEMs to embed XBee solutions into an application and have seamless communication to other devices using USB, RS-232, RS-485, digital I/O, analog I/O, Ethernet, Wi-Fi and cellular IP with plug-and-play ease.

Platform	XBee-PRO® 900
<b>Performance</b>	
RF Data Rate	156 Kbps
Indoor/Urban Range	450 ft (140 m)
Outdoor/RF Line-of-Sight Range	Up to 1.8 miles (3 km)
Outdoor/RF Line-of-Sight Range w/ High-Gain Antenna	Up to 6 miles (10 km)
Transmit Power	50 mW (+17 dBm)
Receiver Sensitivity (10% PER)	-100 dBm
<b>Features</b>	
Serial Data Interface	3.3V CMOS Serial UART (5V tolerant inputs)
Configuration Method	API or AT commands, local or over-the-air
Frequency Band	900 MHz ISM
Interference Immunity	FHSS
Serial Data Rate	Up to 230 Kbps
ADC Inputs	Coming in future firmware revisions
Digital I/O	Coming in future firmware revisions
Antenna Options	Wired Whip, U.FL connector, RPSMA connector
<b>Networking &amp; Security</b>	
Encryption	128-bit AES
Reliable Packet Delivery	Retries/Acknowledgments
Addressing Options	PAN ID, channel, 64-bit address
Channels	8 hopping patterns on 12 channels or single channel
<b>Power Requirements</b>	
Supply Voltage	3.0 – 3.6 VDC
Transmit Current	210 mA
Receive Current	80 mA
Power-Down Current	60 uA @ 3.3V
<b>Regulatory Approvals</b>	
FCC (USA)	Yes
IC (Canada)	Yes
C-TICK (Australia)	No



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**Digi International**, the leader in device networking for business, develops reliable products and technologies to connect and securely manage local or remote electronic devices over the network or via the web. With over 20 million ports shipped worldwide since 1985, Digi offers the highest levels of performance, flexibility and quality.

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