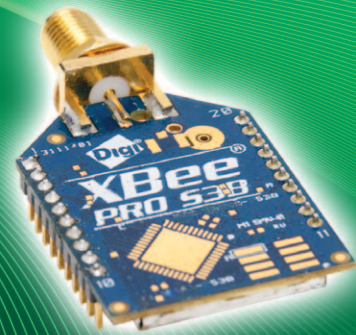


# XBee-PRO<sup>®</sup> 900HP

900 MHz RF Module

Best-in-class range RF module features software-complete mesh or multipoint topologies with advanced sleep modes.



## Overview

XBee-PRO 900HP embedded modules provide best-in-class range wireless connectivity to devices. They take advantage of the DigiMesh<sup>®</sup> networking protocol, featuring dense network operation and support for sleeping routers, and are also available in a proprietary point-to-multipoint configuration. Supporting RF line-of-sight ranges up to 28 miles (with high-gain antennas), and data rates of up to 200 Kbps, these modules are ideal for extended-range applications requiring increased data throughput.

The XBee-PRO 900HP requires no programming and can be configured easily using Digi's free X-CTU software or via a simplified AT command set. XBee modules are pre-certified for use in multiple countries, further reducing development costs and time to market.

XBee<sup>®</sup> modules are easy to use, share a common hardware footprint and are available in a variety of different protocols, enabling users to substitute one XBee for another with minimal development time and risk.

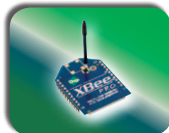
### Related Products



Gateways

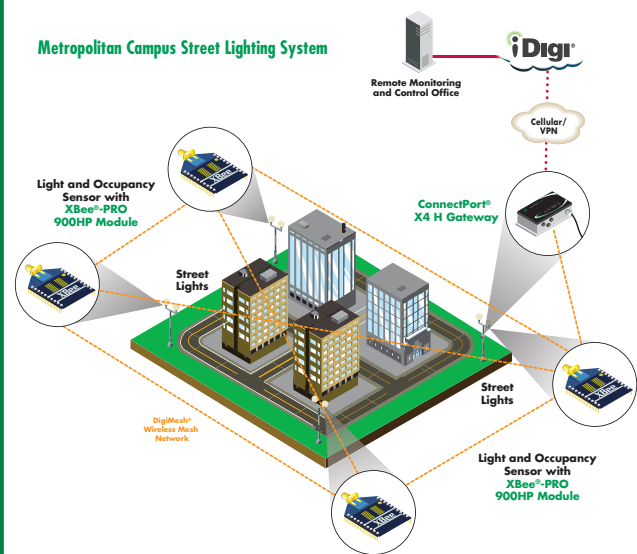


Development Kits



ZigBee Modules

### Application Highlight



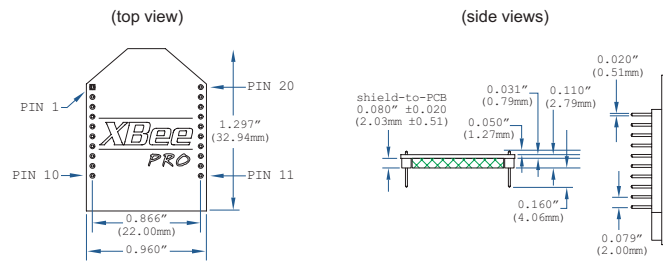
### Features/Benefits

- Superior outdoor LOS range of up to 28 miles
- Simplified AT command set or advanced XBee API accelerates time to market
- Over-the-air firmware updates via other XBee-PRO 900HP modules or iDigi<sup>®</sup> Device Cloud<sup>™</sup>
- Software-selectable channel mask for interference immunity
- Advanced sleep modes include sleeping routers, pin sleep, cyclic sleep
- RF data rate up to 200 Kbps
- Patent-pending channel selectivity algorithm allows for more dense networks



# XBee-PRO® 900HP

Hardware	
Processor	ADF7023 transceiver, Cortex-M3 EFM32G230 @ 28 MHz
Frequency Band	902 to 928 MHz, software selectable channel mask for interference immunity
Antenna Options	Wire, U.FL and RPSMSA
Performance	
RF Data Rate	10 Kbps or 200 Kbps
Indoor/Urban Range	up to 2000 ft (610 m)
Outdoor/ Line-Of-Sight Range	Up to 9 miles (14 km) w/ dipole antenna; Up to 28 miles (45 km) w/ high-gain antenna
Transmit Power	Up to 24 dBm (250 mW) software selectable
Receiver Sensitivity	-101 dBm @ 200 Kbps, -110 dBm @ 10 Kbps
Features	
Data Interface	UART (3V), SPI
GPIO	Up to 15 Digital I/O, 4 10-bit ADC inputs, 2 PWM outputs
Networking Topologies	DigiMesh, Repeater, Point-to-Point, Point-to-Multipoint, Peer-to-Peer
Spread Spectrum	FHSS (Software Selectable Channels)
Power	
Supply Voltage	2.1 to 3.6 VDC
Transmit Current	215 mA
Receive Current	29 mA
Sleep Current	2.5 uA
Regulatory Approvals	
FCC (USA)	MCQ-XB900HP
IC (Canada)	1846A-XB900HP
C-Tick (Australia)	Yes
Anatel (Brazil)	Pending



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