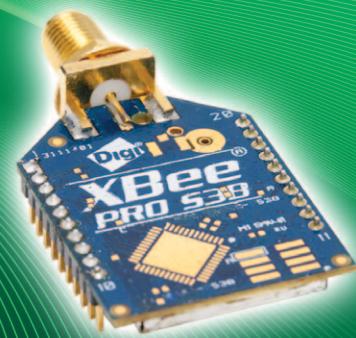


# XBee-PRO® 900HP

## 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® 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® 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.

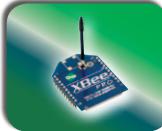
## Related Products



Gateways

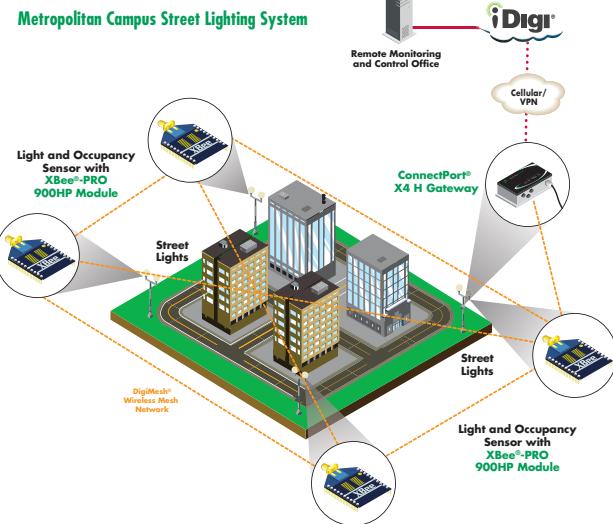


Development Kits



ZigBee Modules

## Application Highlight



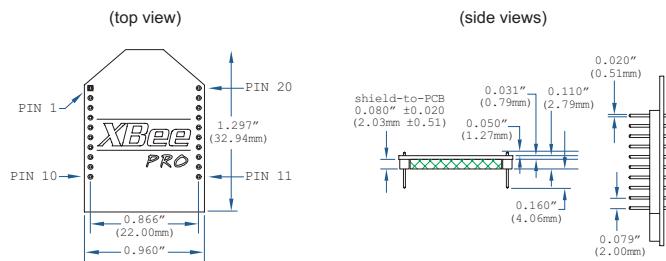
## Features/Benefits

- 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® Device Cloud™
- 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 RP-SMA
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 $\mu$ A
Regulatory Approvals	
FCC (USA)	MCQ-XB900HP
IC (Canada)	1846A-XB900HP
C-Tick (Australia)	Yes
Anatel (Brazil)	Pending



Visit [www.digi.com](http://www.digi.com) for part numbers.

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