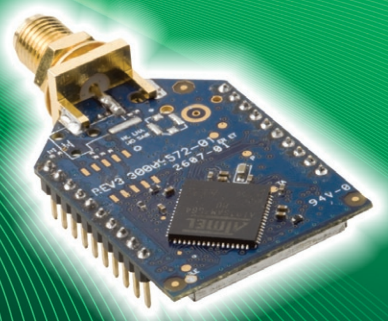
XBee-PRO® 900

Point-to-Multipoint Embedded RF Modules for OEMs



XBee-PRO 900 modules deliver device connectivity with exceptional RF range performance using a fast point-to-multipoint protocol.

Overview

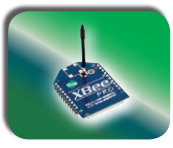
XBee-PRO 900 embedded RF modules provide extended-range wireless connectivity to end-point devices. These modules use a proprietary 900 MHz point-to-multipoint protocol that balances overall RF performance with a fast 156 Kbps data rate to the end node. Supporting RF line-of-sight distances of up to 6 miles (with high gain antennas), they are ideal for extended-range wireless applications requiring low latency and increased data throughput.

As a part of Digi's XBee® family of RF products, these modules are easy to use, share a common hardware footprint, and are fully interoperable with other XBee products utilizing the same technology. They are available in a variety of different protocols to suit different applications, enabling users to substitute one XBee module for another with minimal development time and risk.

Digi's unsurpassed offering of Drop-in Networking products provides users with seamless communication between devices. XBee adapters provide wireless connectivity to electronic devices in wired networks. ConnectPort™ X gateways enable users to access and configure remote devices in a network.

Related Products


Gateways


Modules

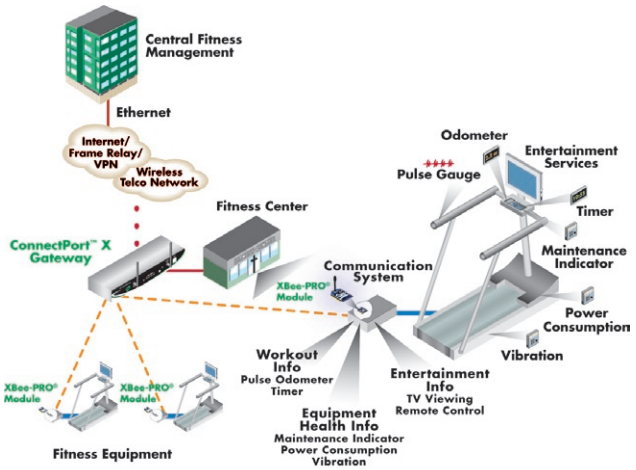

Adapters


Development Kits


Network Extenders


Accessories

Application Highlight



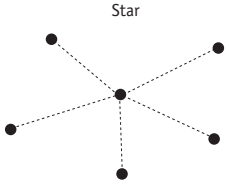
Features/Benefits

- No configuration needed for out-of-the-box RF communications
- Common XBee footprint for a variety of RF modules
- 900 MHz for extended-range operation
- Outdoor RF line-of-sight range up to 6 miles (10 km)
- Fast 156 Kbps RF data rate
- Sleep modes supported for increased battery life
- Multiple antenna options
- Capable of deploying the DigiMesh™ protocol with a simple firmware change

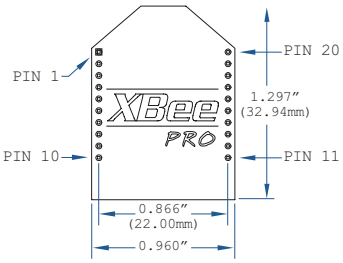
Digi®

www.digi.com

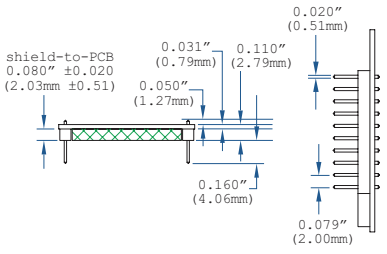
Platform	XBee-PRO® 900
Performance	
RF Data Rate	156 Kbps
Indoor/Urban Range	450 ft (140 m)
Outdoor/RF Line-of-Sight Range	Up to 1.8 miles (3 km)
Outdoor/RF Line-of-Sight Range w/ High-Gain Antenna	Up to 6 miles (10 km)
Transmit Power	50 mW (+17 dBm)
Receiver Sensitivity (10% PER)	-100 dBm
Features	
Serial Data Interface	3.3V CMOS Serial UART (5V tolerant inputs)
Configuration Method	AT & API, 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
Networking & Security	
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
Power Requirements	
Supply Voltage	3.0 – 3.6 VDC
Transmit Current	210 mA
Receive Current	80 mA
Power-Down Current	60 uA @ 3.3V
Regulatory Approvals	
FCC (USA)	Yes
IC (Canada)	Yes
C-TICK (Australia)	No



(top view)



(side views)



Visit www.digi.com for part numbers.

DIGI SERVICE AND SUPPORT - You can purchase with confidence knowing that Digi is here to support you with expert technical support and a strong five-year warranty. www.digi.com/support

Digi International
877-912-3444
952-912-3444
info@digi.com

Digi International France
+33-1-55-61-98-98
www.digi.fr

Digi International KK
+81-3-5428-0261
www.digi-intl.co.jp

Digi International (HK) Limited
+852-2833-1008
www.digi.cn

MAKING Wireless M2M EASY™

91001475
B1/309

BUY ONLINE • www.digi.com