

# XBee-PRO<sup>®</sup> XSC

900 MHz Long-Range RF Module

High-performance, long-range RF module is ideal for applications with low power requirements.



## Overview

Digi's latest XBee-PRO XSC module features two times the throughput and 20 times less current draw than the previous XSC module, making it ideal for long-range sensor applications. The module features an ADF7023 transceiver from Analog Devices, delivering best-in-class distances up to 28 miles Line-of-Sight (LOS), along with low power consumption, drawing less than 2.5  $\mu$ A in power down.

The latest XBee-PRO XSC (S3B hardware) allows for several firmware options which are firmware compatible with the legacy 9XStream<sup>®</sup> and the legacy XBee-PRO XSC modules. In addition, future firmware versions will support DigiMesh<sup>®</sup> along with Digi's proprietary point-to-multipoint protocols.

Digi's free X-CTU configuration utility simplifies the configuration of the XSC module, which requires no programming. In addition, it can be easily configured via a simplified AT command set. The modules are pre-certified for North America and Australia, further reducing development costs and time to market.

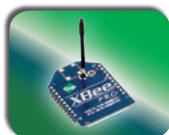
### Related Products



Gateways

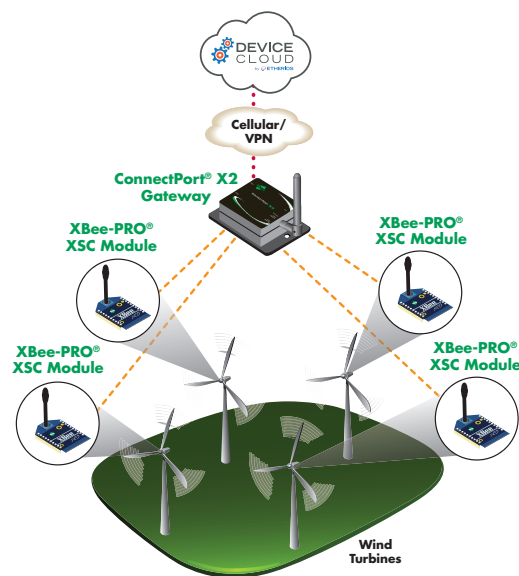


Development Kits



ZigBee Modules

### Application Highlight

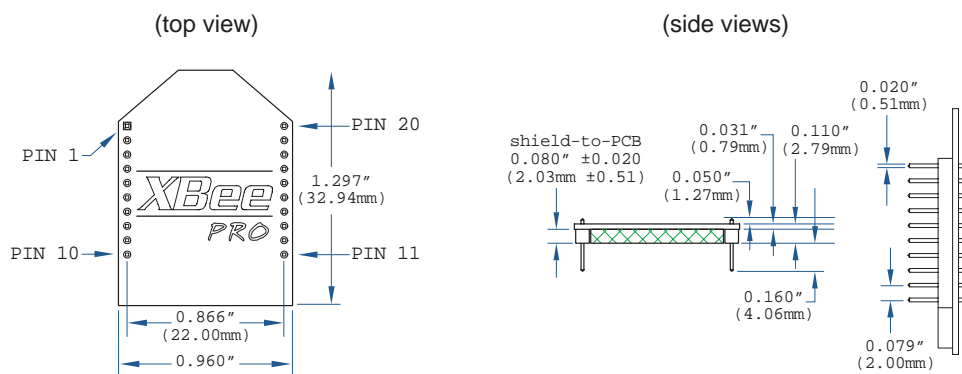


### Features/Benefits

- Simplified AT command set accelerates time to market
- Modules are over-the-air compatible with legacy 9XStream and XSC products
- 20 times less current draw than previous XSC module
- Superior outdoor LOS range of up to 28 miles
- Pin-compatible with existing through-hole XBee RF modules
- RF data throughput up to 20 Kbps
- 900 MHz license-free ISM band operation



Specifications		XBee-PRO® XSC (S3)	XBee-PRO® XSC (S3B)
Hardware			
Processor	ADF7025 transceiver, Atmel AT91SAM7S		ADF7023 transceiver, Cortex-M3 EFM32G230 @ 28 MHz
Frequency Band	902 MHz to 928 MHz		
Antenna Options	Wire, U.FL, RPSMA		
Performance			
RF Data Rate	10 Kbps	10 Kbps or 20 Kbps	
Indoor/Urban Range	Up to 1200 ft (370 m)	Up to 2000 ft (610 m)	
Outdoor/Line-Of-Sight Range	Up to 6 mi (9.6 km)	Up to 9 mi (14 km) w/ dipole antenna Up to 28 mi (45 km) w/ high-gain antenna	
Transmit Power	Up to 20 dBm (100 mW)	Up to 24 dBm (250 mW) software selectable	
Receiver Sensitivity	-106 dBm	-109 dBm at 9600 baud -107 dBm at 19200 baud	
Features			
Spread Spectrum	FHSS		
Operating Temperature	-40° C to +85° C		
Power			
Supply Voltage	3.0 - 3.6 VDC	2.4 to 3.6 VDC	
Transmit Current	265 mA	215 mA	
Receive Current	65 mA	26 mA	
Sleep Current	45 uA	2.5 uA	
Regulatory Approvals			
FCC	MCQ-XBEEEXSC	MCQ-XBPS3B	
IC	1846A-XBEEEXSC	1846A-XBPS3B	
C-Tick	No	Australia	
Pricing			
Development Kit (includes 2 modules)	\$149		



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