# XCite™ Embedded RF Modules

900 MHz Embedded RF Modules for OEMs

900 MHz embedded RF modules provide OEMs with a low-cost wireless solution.



## **Overview**

Digi's XCite embedded RF modules enable easy and reliable serial wireless connectivity between devices with minimal development out-of-the-box. A low-cost alternative to XStream® embedded RF modules, XCite modules are pin-for-pin and over-the-air compatible with XStream modules (in 9.6 kbps configurations).

Innovations stamped in their design enable XCite RF modules to yield two- to eight-times the range of competing RF devices. This allows OEMs and integrators to cover more ground with fewer devices, with increased reliability. Additionally, XCite RF modules are easy to use, thereby reducing the complexity of data system development and time to market.

Available in a variety of configurations, including Commercial or Industrial Temperature ratings, and two antenna variants, XCite RF modules can wirelessly connect a variety of devices across many applications including remote monitoring, building automation/security, industrial automation/SCADA, fleet management/asset tracking and sensor data capture in embedded systems.

### **Application Highlight**

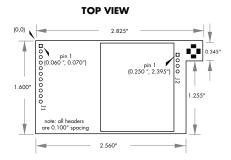


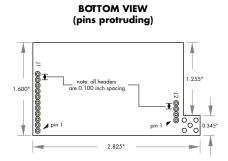
#### **Features/Benefits**

- Indoor/urban range up to 300 feet
- Outdoor line-of-sight range up to 1000 feet
- 7 frequency hopping channels each with up to 65K addresses
- Outstanding receiver sensitivity (-110 dB @9600 bps)
- Pin-for-pin and form-factor compatible with XStream RF modules
- Over-the-air compatible with XStream RF modules (@ 9.6 kbps)
- Low-power features for powersensitive applications:
  - Pin, serial port and cyclic sleep modes available
- Wired whip and RPSMA connector antenna options
- Commercial (0 to 70 C) and Industrial temperature ratings (-40 to 85 C)

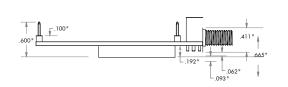


Specifications	XCite™ (900 MHz)	
Performance		· · · · · · · · · · · · · · · · · · ·
Indoor/Urban Range (w/ 2.1 dB dipole antenna)	Up to 300 ft (90 m)	
Outdoor RF Line-of-Sight Range (w/ 2.1 dB dipole antenna)	Up to 1000 ft (300 m)	
Transmit Power Output	4 mW (6 dBm)	
Interface Data Rate (software selectable)	1200 - 57600 bps	
Throughput Data Rate	9,600 bps	38,400 bps
RF Data Rate	10,000 bps	41,666 bps
Receiver Sensitivity	-108 dBm	-104 dBm
Power Requirements		
Supply Voltage	2.85 - 5.50 VDC	
Transmit Current	55 mA	
Receive Current	45 mA	
Power-down Current	< 20 μA	
General		
Dimensions (L x W x H)	1.600 in x 2.825 in x 0.60 in (4.06 cm x 7.18 cm x 1.52 cm)	
Weight	0.8 oz (24.0 g)	
Operating Temperature	0° C to 70° C (Commercial) -40° C to 85° C (Industrial)	
Antenna Options	RPSMA or Wire Antenna	
Operating Frequency	ISM 902 - 928 MHz	
Networking & Security		
Supported Network Topologies	Peer-to-Peer (no master/slave dependencies), Point-to-Point, Point-to-Multipoint, Multidrop	
Number of Channels (software selectable)	7 frequency hopping channels (Hopping Mode) & 25 single frequency channels (Single Channel Mode)	
Network Filtration Layers	VID, Channel, Destination Address	
Certifications		
FCC Part 15.247	OUR-9XCITE	
Industry Canada (IC)	4214A-9XCITE	









#### 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 Worldwide HQ

877-912-3444 952-912-3444

Digi International France +33-1-55-61-98-98

www.digi.fr

**Digi International** Japan +81-3-5428-0261

www.digi-intl.co.jp

**Digi International** India +91-80-4287-9887

**Digi International Singapore** +65-6213-5380

**Digi International** China +86-21-5150-6898 www.digi.cn

91001414 B1/911

BUY ONLINE • www.digi.com



© 2005-2011 Digi International Inc.

All rights reserved. Digi, Digi International, the Digi logo, the Wireless M2M logo, XCite and XStream are either trademarks or registered trademarks of Digi International Inc. in the United States and other countries worldwide. All other trademarks are the property of their



