Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

DIGI XLR PRO® MODULE

1-Watt 900 MHz RF module features best-in-class range and interference immunity to enable data communications even in the noisiest RF environments.

The Digi XLR PRO Module is a high performance, industrial grade long-range 900 MHz embedded radio that offers reliable wireless communications for OEM devices.
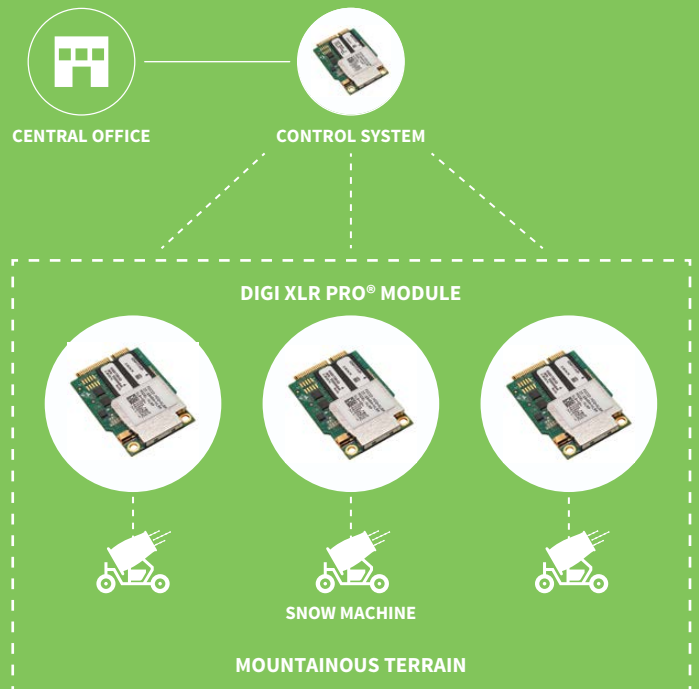
Digi's patented Punch2® Technology leverages chirp spread spectrum (CSS) modulation to provide better receiver sensitivity, multipath performance, and interference rejection than is available through commonly used frequency hopping spread spectrum (FHSS) or direct sequence spread spectrum (DSSS) systems. Configuration with XCTU allows for quick development, testing and configuration of Digi XLR PRO modules.

The Digi XLR PRO Module is ideal for OEMs developing products used in industrial applications including oil/gas, precision agriculture and utilities. It is available in the PCIe form factor, with serial communications via UART or SPI between the module and the OEM's microcontroller.

BENEFITS

- Patented Punch2 Technology enables industry-leading interference immunity and receive sensitivity of -120 dBm
- Adjustable output power up to 1-Watt achieves exceptional range with high-gain antenna
- 128-bit AES encryption for secure data communications
- Fully certified for use in unlicensed 900 MHz band
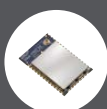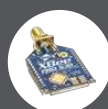- Up to 3.2 Mb/s for higher bandwidth applications

APPLICATION EXAMPLE

CENTRAL OFFICE   CONTROL SYSTEM

DIGI XLR PRO® MODULE

SNOW MACHINE

MOUNTAINOUS TERRAIN

RELATED PRODUCTS

Digi XLR PRO®
Radios

XCTU

Digi XBee®
SX Modules

Digi XBee-PRO®
900HP Modules

SPECIFICATIONS — Digi XLR PRO® Module

GENERAL

DIMENSIONS	34 mm x 51 mm x 6.1 mm (1.34 in x 2.01 in x .240 in)
WEIGHT	11 g (.39 oz)
ROHS	Compliant

PERFORMANCE

FREQUENCY RANGE	ISM 902 to 928 MHz
RF DATA RATE	9.4 kb/s to 3.2 Mb/s
MAXIMUM TRANSMIT POWER (SOFTWARE SELECTABLE)	+30 dBm (1 Watt)
IDEAL CONDITIONS LINE OF SIGHT	1.2 Mb/s: up to 100+ miles*
URBAN RANGE LINE OF SIGHT	9.4 kb/s: up to 25 miles* 141 kb/s: up to 8 miles** 591 kb/s: up to 3.6 miles 3.2 Mb/s: up to 1 mile**
RECEIVER SENSITIVITY	9.4 kb/s: -120 dBm 141 kb/s: -112 dBm 3.2 Mb/s: -98 dBm
RECEIVER SELECTIVITY	141 kb/s: 70 dB (below 908 MHz, above 922 MHz); 40 dB (908 MHz to 922 MHz)
UART DATA RATE	Up to 921.6 kb/s
SPI DATA RATE	Up to 6 Mb/s

NETWORKING AND SECURITY

MODULATION	Patented Punch2® technology
SUPPORTED NETWORK TOPOLOGIES	Point-to-point/Point-to-multipoint
ENCRYPTION	128-bit AES

POWER REQUIREMENTS

SUPPLY VOLTAGE	3.8 to 5.5 VDC
RECEIVE CURRENT	295 mA @ 5 VDC (typical)
TRANSMIT CURRENT	1.58 A @ 5 VDC (typical)
SHUTDOWN/POWER DOWN CURRENT	3 uA typical at room temperature

ENVIRONMENTAL

OPERATING TEMPERATURE	-40° C to +85° C

REGULATORY APPROVALS

USA / CANADA	FCC ID: MCQ-XLRP IC: 1846A-XLRP

CONNECTORS

ANTENNA	MMCX

* Based on 100-mile range results. Other data rates scale based on sensitivity levels. Results will vary based on noise levels and line of sight quality.

** Estimated based on 3.6-mile range results

PART NUMBERS — DESCRIPTION

PART NUMBERS	DESCRIPTION
XL9K-001	XLR PRO Module Development Kit, US/CA
XL9-ME-001	XLR PRO Module, 900MHz, 1W, P2MP, PCIe, MMCX Antenna, US/CA

91003504
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