



1 WATT/900 MHZ
STAND-ALONE
RADIO MODEMS

XTEND®-PKG RF MODEMS



900 MHz radio modems offer long-range performance, advanced networking and simple out-of-the-box operation with multiple data interface options

Digi's XTend-PKG RF modems provide everything you need for out-of-the-box serial cable replacement, enabling quick wireless connectivity of electronic devices across a broad range of applications. Simply feed data into one modem and the data is transported to the other end of a long range wireless link. Data security is provided by 256-bit AES encryption (128-bit AES is available outside of North America). If more advanced functionality is needed, the modems support an extensive set of AT and binary commands.

Available in multiple interface options, including RS-232/422/485 and USB, XTend modems are ideally suited for remote monitoring, building automation/security, industrial automation/SCADA, fleet management/asset tracking and sensor data capture in embedded systems.

BENEFITS

- Outdoor line-of-sight range up to 40 miles* (with high gain antenna)
- Outstanding receiver sensitivity (-110 dBm @ 9600 bps)
- Adjustable power output from 100 mW to 1 W; up to 4 W EIRP (with 6 dB antenna)
- Low power consumption for power-sensitive applications
 - Pin, serial port and cyclic sleep modes available
- Streaming, acknowledged and multi-transmit modes supported
- Easy out-of-the box operation — no configuration necessary
- Durable industrial grade enclosure

RELATED PRODUCTS



XTend® RF
Module



Digi XLR PRO®



ConnectPort®
X2

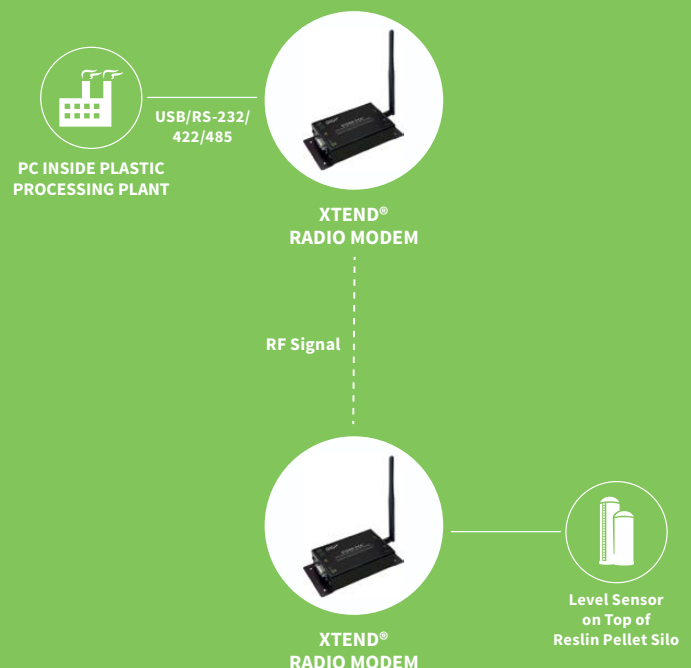


XCTU

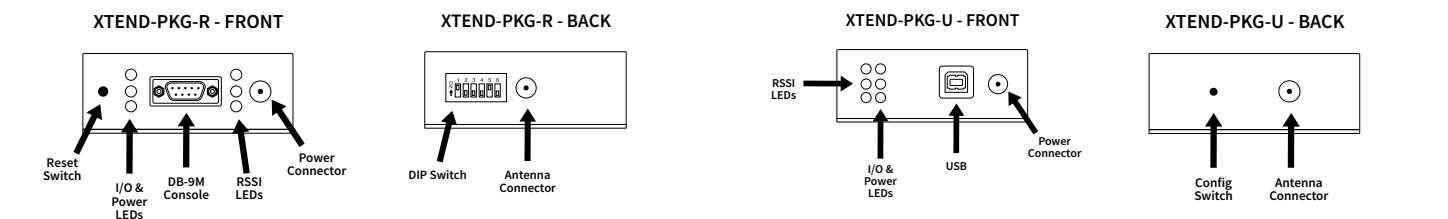


Accessories

APPLICATION EXAMPLE



SPECIFICATIONS	XTend®-PKG-R XTend®-PKG-U	
PERFORMANCE		
INDOOR/URBAN RANGE (W/ 2.1 DB DIPOLE ANTENNA)*	Up to 1000 feet (305 m)	
OUTDOOR RF LINE-OF-SIGHT RANGE (W/ 2.1 DB DIPOLE ANTENNA)*	Up to 9 miles (14 km)	
OUTDOOR RF LINE-OF-SIGHT RANGE (W/ HIGH-GAIN ANTENNA)*	Up to 40 miles (64 km)	
TRANSMIT POWER OUTPUT (SOFTWARE SELECTABLE)	100 mW - 1 W (20 - 30 dBm)	
INTERFACE DATA RATE	10 - 230,400 bps (including non-standard baud rates)	
RF DATA RATE	10 Kbps to 125 Kbps	
RECEIVER SENSITIVITY	-110 dBm (@9,600 bps throughput data rate), -100 dBm (@115,200 bps)	
POWER REQUIREMENTS		
SUPPLY VOLTAGE	7 - 28V	7 - 28V
RECEIVE CURRENT	110 mA	100 mA (Self Power)
TRANSMIT CURRENT	Up to 580 mA	88 - 480 mA
PIN SLEEP POWER-DOWN	18 mA	17 mA
IDLE CURRENT (VARIOUS CYCLIC SLEEP INTERVALS)	19 - 39 mA	21 - 35 mA (Self Power)
SERIAL PORT SLEEP POWER-DOWN	45mA	45mA
GENERAL		
CONNECTION OPTIONS	RS-232/422/485, DB-9	USB
DIMENSIONS (L X W X H)	2.75 in x 5.50 in x 1.13 in (6.99 cm x 13.97 cm x 2.86 cm)	2.75 in x 5.50 in x 1.13 in (6.99 cm x 13.97 cm x 2.86 cm)
WEIGHT	7.10 oz (200 g)	7.10 oz (200 g)
OPERATING TEMPERATURE	-40° C to 85° C (industrial)	0° C to 70° C (commercial)
ANTENNA OPTIONS	RPSMA (Reverse Polarity SMA)	RPSMA (Reverse Polarity SMA)
IMPEDANCE	50 ohms unbalanced	50 ohms unbalanced
NETWORKING & SECURITY		
OPERATING FREQUENCY	ISM 902 - 928 MHz	
SPREAD SPECTRUM	FHSS (Frequency Hopping Spread Spectrum)	
MODULATION	FSK (Frequency Shift Keying)	
SUPPORTED NETWORK TOPOLOGIES	Peer-to-Peer (no master/slave dependencies), Point-to-Point, Point-to-Multipoint	
CHANNEL CAPACITY	10 hop sequences share 50 frequencies	
ENCRYPTION	256-bit AES Encryption (AES algorithm meets Federal Information Processing Standard-197 (FIPS-197))	
AGENCY APPROVALS		
FCC PART 15.247	MCQ-XBPSX	
INDUSTRY CANADA (IC)	1846A-XBPSX	
AUSTRALIA	RCM	



*Range figure estimates are based on free-air terrain with limited sources of interference. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting antenna, height of receiving antenna, weather conditions, interference sources in the area, and terrain between receiver and transmitter, including indoor and outdoor structures such as walls, trees, buildings, hills, and mountains.

PART NUMBERS	DESCRIPTION
XTP9B-PKI-R	XTend Replacement, PKG, Serial, North America
XTP9B-PKI-RA	XTend Replacement, PKG, Serial, w/ Accessories, North America
XTP9B-PKI-RA-NL	XTend Replacement, PKG, Serial, w/ Accessories, No label, North America
XTP9B-PKI-RA-NA	XTend Replacement, PKG, Serial, w/ Accessories, 128-bit AES, North America
XTP9B-PKC-UA	XTend Replacement, PKG, USB, w/ Accessories, North America
XTPH9B-PKI-RA-NA	XTend Replacement, PKG, RS232/485, Includes Accessories, 128-bit AES, Australia

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