Chipsmall

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

XBEE-PRO®DIGIMESH® ADAPTERS

Adapters utilize the DigiMesh peer-to-peer networking protocol to connect multiple types of devices over a self-healing, low-power mesh network

XBee-PRO DigiMesh adapters deliver wireless connectivity to electronic devices using the DigiMesh protocol. This innovative, peer-to-peer networking protocol offers users increased stability by forming self-healing, self-discovering mesh networks. DigiMesh features dense network operation and support for sleeping routers, extending the operational life of battery dependent networks.
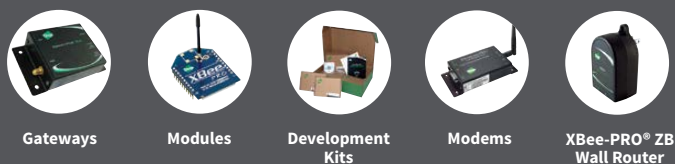
XBee-PRO DigiMesh adapters are available in 2.4 GHz with interface options that include RS-232, RS-485, USB, digital and analog I/O.

XBee-PRO DigiMesh adapters are compatible with other products using the DigiMesh protocol, such as ConnectPort® X gateways, and XBee and XBee-PRO wireless modules. By using Digi Device Cloud℠, users can securely access and manage devices in their DigiMesh network from anywhere in the world.
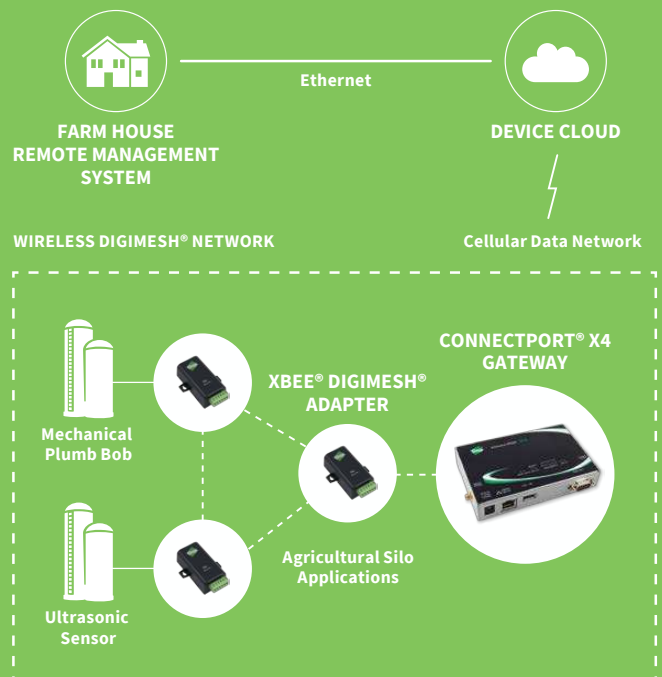
BENEFITS

– Simple topology to deploy and grow
– XBee-PRO platform provides extended range
– DigiMesh peer-to-peer networking protocol
  - Self-healing and discovery for network stability
  - Sleeping routers supported for long battery life
  - No master/coordinator required
– Compatible with other devices using the DigiMesh protocol, like ConnectPort X gateways, RF modules and more

APPLICATION EXAMPLE

FARM HOUSE
REMOTE MANAGEMENT
SYSTEM

Ethernet

DEVICE CLOUD

WIRELESS DIGIMESH® NETWORK

Cellular Data Network

Mechanical Plumb Bob

XBEE® DIGIMESH® ADAPTER

CONNECTPORT® X4 GATEWAY

Ultrasonic Sensor

Agricultural Silo Applications

RELATED PRODUCTS

Gateways

Modules

Development Kits

Modems

XBee-PRO® ZB Wall Router

SPECIFICATIONS | DigiMesh® 2.4

PERFORMANCE

DATA RATE	250 Kbps
INDOOR/URBAN RANGE	300 ft (90 m) / 200 ft (60 m) Int'l variant
OUTDOOR/RF LINE-OF-SIGHT RANGE	1 mile (1.6 km) / 2500 ft (750 m) Int'l variant
TRANSMIT POWER	63 mW (+18 dBm) / 10 mW (+10 dBm) Int'l variant
RECEIVER SENSITIVITY (1% PER)	-100 dBm

FEATURES

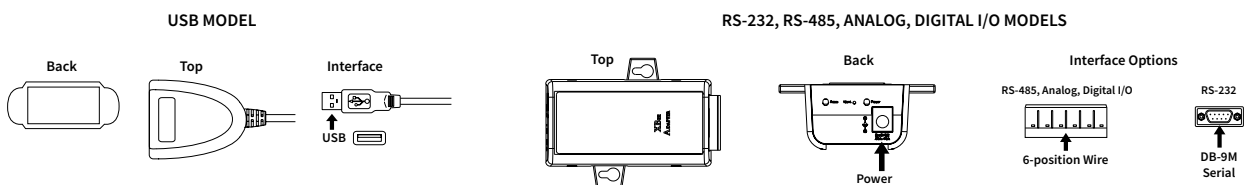|	
CONFIGURATION METHOD	API or AT commands
FREQUENCY BAND	2.4 GHz ISM
INTERFERENCE IMMUNITY	DSSS (Direct Sequence Spread Spectrum)
SERIAL DATA INTERFACE	RS-232 DB9M/DTE or RS-485 (6-position wire terminal block) switch selectable between RS-422 half-duplex, RS-422 full duplex and RS-485
USB DATA INTERFACE	USB 2.0 full speed (with ESD protection); connects to host via captive 1-meter cable
ANALOG INTERFACE & DIGITAL I/O	6-position wire terminal block; Analog: 0 - 10V, 4 - 20 mA, or +/- 2VDC differential; Digital IO: Digital input or sinking driver output
ANTENNA TYPE	RPSMA (USB uses internal wire antenna)
LEDS	Power: Glows green when external power is supplied (not active when battery powered to limit power drain) Associate: Blinks when unit is connected and associated on an RF network
OPERATING TEMPERATURE	-40° C to +70° C (-40° F to +158° F)
DIMENSIONS	RS-232, RS-485, Analog, Digital I/O models: 3.60 in x 1.90 in x 1.20 in (9.14 cm x 4.82 cm x 3.04 cm) USB models: 2.87 in x 1.80 in x 0.83 in (7.29 cm x 4.57 cm x 2.10 cm)
WEIGHT	RS-232, RS-485, Analog, Digital I/O models: 2.29 oz (64.92 g); USB models: 1.60 oz (45.36 g)

NETWORKING & SECURITY

ENCRYPTION	128-bit AES
RELIABLE PACKET DELIVERY	Retries/Acknowledgements
ADDRESSING OPTIONS	PAN ID, channel, 64-bit address
CHANNELS	16

POWER REQUIREMENTS

POWER INPUT	3.7 - 6.0VDC
POWER SUPPLY	120VAC/240VAC to 5VDC power supply, internal lithium battery pack or external 6-cell D battery holder (all sold separately)
USB MODEL	Bus powered (+5V)
TRANSMIT CURRENT	210 mA
RECEIVE CURRENT	55 mA

REGULATORY APPROVALS

EMISSIONS	FCC Part 15, EN55022:2006 Class B, ICES-003Iss.4, EN55024:1998+A1 (2001) + A2 (2003), AS/NZS CISPR 22:2006, VCCI V 3/2007.04
SAFETY	IEC/EN 60950-1 (2001), CB Certificate, UL/cUL 60950-1
ROHS	Yes

USB MODEL

Back   Top   Interface

RS-232, RS-485, ANALOG, DIGITAL I/O MODELS

Top   Back   Interface Options

RS-485, Analog, Digital I/O   RS-232

6-position Wire   DB-9M Serial

Power

DIGI

PART NUMBERS	DESCRIPTION
XA-M14-CE1P-A	XBee-PRO DigiMesh 2.4, USB adapter
XA-M14-CE1P-W	XBee-PRO DigiMesh 2.4, USB adapter (International)
XA-M14-CS2P-A	XBee-PRO DigiMesh 2.4, RS-232 adapter (3-6V)
XA-M14-CS2P-W	XBee-PRO DigiMesh 2.4, RS-232 adapter (3-6V) (International)
XA-M14-CS3P-A	XBee-PRO DigiMesh 2.4, RS-485 adapter (3-6V)
XA-M14-CS3P-W	XBee-PRO DigiMesh 2.4, RS-485 adapter (3-6V) (International)
XA-M14-CS4P-A	XBee-PRO DigiMesh 2.4, digital IO adapter (3-6V)
XA-M14-CS4P-W	XBee-PRO DigiMesh 2.4, digital IO adapter (3-6V) (International)
XA-M14-CS5P-A	XBee-PRO DigiMesh 2.4, analog input adapter (3-6V)
XA-M14-CS5P-W	XBee-PRO DigiMesh 2.4, analog input adapter (3-6V) (International)

FOR MORE INFORMATION
PLEASE VISIT WWW.DIGI.COM

91001635
B2/1116

DIGI INTERNATIONAL WORLDWIDE HQ
877-912-3444 / 952-912-3444 / www.digi.com

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 SINGAPORE
+65-6213-5380

DIGI INTERNATIONAL CHINA
+86-21-50492199 / www.digi.com.cn

DIGI