XBEE® GATEWAY FAMILY

Programmable gateway connects XBee devices to cloud-based applications over cellular, Wi-Fi or Ethernet

The XBee Gateway provides a low-cost XBee to IP solution, featuring scalable remote configuration and management of XBee networks with Digi Device CloudSM. By default, all XBee data sent to the gateway is automatically available to online applications via Device Cloud. With a simple, open-source Python development environment, this gateway also enables custom applications to run locally while interfacing across existing Ethernet/Wi-Fi/cellular networks for WAN connectivity to cloud-based software applications.
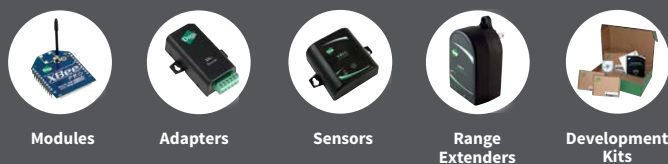
XBee Gateway products can be managed remotely via Device Cloud, allowing users to remotely manage thousands of deployed devices, supporting features like remote firmware upgrades and event alarms.

The XBee Gateway can be tested and developed using the XBee ZigBee Cloud Kit, which fully integrates the XBee Gateway, XBee Module, Device Cloud and a sample web application into a cohesive internet-connected solution. This kit is a powerful tool that enables developers to create internet-connected prototypes in 30 minutes or less.
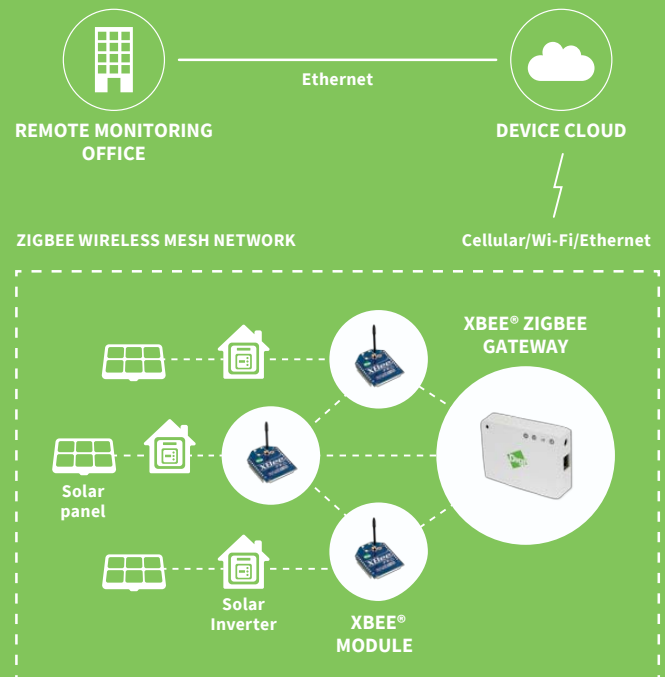
BENEFITS

– Open Source Python environment for custom application development on the gateway
– Out-of-box integration with Digi Device Cloud enables remote connectivity, configuration and management of XBee networks
– Secure, scalable access to an unlimited number of remote XBee-based devices
– Cellular, Wi-Fi and Ethernet WAN options for flexible broadband connectivity

APPLICATION EXAMPLE

RELATED PRODUCTS

Modules   Adapters   Sensors   Range Extenders   Development Kits

DIGI DEVICE CLOUD

CONNECTING ANY APPLICATION TO ANYTHING, ANYWHERE
YOUR BRAND, YOUR FIRMWARE AND CONFIGURATION

Digi Device Cloud is a public, platform-as-as-service (PaaS) that allows organizations to redefine the way they run their business and transform their customers' experience through remote management of assets and development of solutions to reduce costs and drive efficiencies.

Device Cloud enables organizations to connect any device, sensor or machine, located anywhere in the world, to the internet and doing so provides new insights to drive those business efficiencies.

Businesses can gain new intelligence through data visualization, increase efficiency of operations by managing devices en masse, and keep their data safe in the cloud with the Device Cloud platform.

BENEFITS

–   Out-of-the-box compatibility with Digi hardware

–   Easy application integration and open APIs

–   No costly infrastructure to operate or maintain

–   Multi-tenant, cloud-based architecture

–   Manage devices en masse

–   Two-way device to cloud communication

–   Asynchronous event updates and alerts

–   Reliable, scalable and secure

–   Broadcast network grade service ability - operating 99.9% or greater

–   Dedicated Security Office
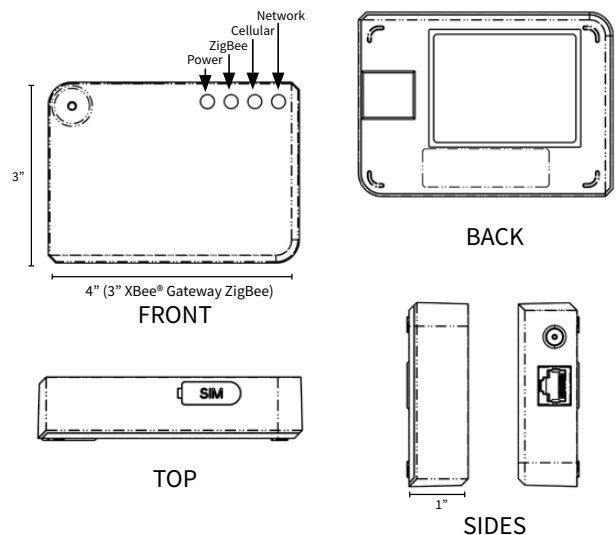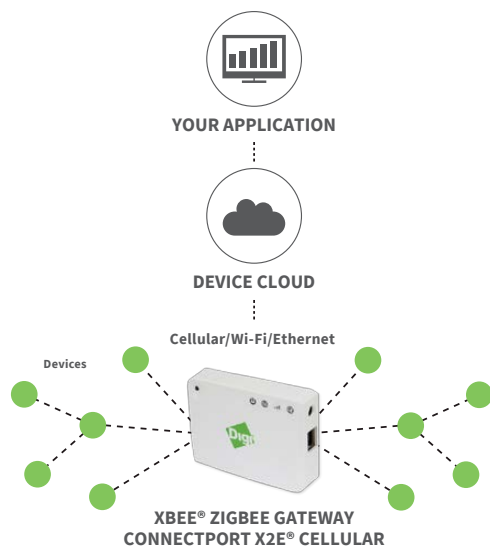
PRIVATE LABELING

YOUR BRAND, YOUR FIRMWARE AND CONFIGURATION

Digi knows that a gateway is only one part of our customers' complex market offering. We are therefore pleased to offer a simple private branding process as a value-add to the XBee Gateway product family.

For a fixed initial charge and a minimum order commitment, Digi customers get a custom part number with their brand, fixed (or "frozen") firmware, and custom default configuration.

BENEFITS

–   Place your brand on the enclosure

–   Pre-load your specific firmware and configuration

–   All for a fixed price

"YOUR BRAND HERE"

YOUR APPLICATION

DEVICE CLOUD

Cellular/Wi-Fi/Ethernet

Devices

XBEE® ZIGBEE GATEWAY
CONNECTPORT X2E® CELLULAR

Power ZigBee Cellular Network

3"

4" (3" XBee® Gateway ZigBee)
FRONT

BACK

SIM

TOP

1"
SIDES

SPECIFICATIONS	XBee® Gateway	XBee® Gateway - Cellular
GENERAL		
MANAGEMENT	Secure enterprise management via Device Cloud	
PROTOCOLS	UDP/TCP, DHCP	
LEDS	Power, Network (LAN/WAN), ZigBee (HAN/PAN)	Power, Network (LAN/WAN), ZigBee (HAN/PAN), Cellular signal strength
SECURITY	SSL tunnels, WEP-40, WEP-104, WPA/WPA2, Authentication with PSK and EAP	SSL tunnels, Cellular network security
DIMENSIONS (L X W X H)	3 in x 3 in x 1 in (7.62 cm x 7.62 cm x 2.54 cm)	3 in x 4 in x 1 in (7.62 cm x 10.16 cm x 2.54 cm)
DEVELOPMENT		
PYTHON VERSION	2.7.1	
OPERATING SYSTEM	Digi Embedded Linux	
XBEE GATEWAY APPLICATION	XBee data sent to the gateway is automatically available to online applications via Device Cloud	
PROCESSOR AND MEMORY (VARIES BY FIRMWARE AND OS VERSION)	Freescale i.MX28, 20 MB RAM, 10 MB file space	
ZIGBEE		
ZIGBEE STACK	ZigBee PRO Feature Set, Ember EM357	
ZIGBEE MODULE	Digi XBee® ZB SMT (S2C)	
TRANSMIT POWER/RECEIVE SENSITIVITY	Worldwide version: XBee ZB SMT transmit power 6.3 mW (+8 dBm); Receiver sensitivity (1% PER) -102 dBm; North American version: XBee-PRO® ZB SMT transmit power: 63 mW (+18 dBm); Receiver sensitivity (1% PER) -102 dBmP	
CELLULAR		
CELLULAR MODULE	N/A	Telit 910 Series
GSM BANDS	N/A	800/850/900/AWS/1900/2100 MHz 3G/UMTS
CDMA BANDS	N/A	800/1900 MHz 1x RTT
WI-FI		
802.11	b/g/n	N/A
DATA RATE	Up to 72.2 Mbps	N/A
TRANSMIT POWER	18 dBm typical (varies by mode, channel and region)	N/A
RECEIVER SENSITIVITY	Up to -87 dBm @ 11 Mbps	N/A
MODES	AP Client Modes only; Access Point Mode not supported	N/A
ETHERNET		
PORTS	1 RJ-45 port	
PHYSICAL LAYER	10/100Base-T	
ROUTING	Ethernet port designed for configuration and WAN backhaul	
POWER REQUIREMENTS		
POWER SUPPLY	5 VDC power supply with barrel connector included	
POWER CONSUMPTION	Typical: 1.2 W, Max: 2.5 W	Typical: 3.5 W, Max: 15 W
ENVIRONMENTAL		
OPERATING TEMPERATURE	0° C to 40° C (32° F to 104° F)	
RELATIVE HUMIDITY	5% to 95% (non-condensing)	
REGULATORY APPROVALS		
MOBILE CERTIFICATIONS (GSM)	N/A	AT&T
MOBILE CERTIFICATIONS (CDMA)	N/A	Verizon and Sprint
SAFETY	UL 60950-1, CSA C22.2 and EN 60950-1	
EMISSIONS/IMMUNITY/TRANSMITTER	CE, FCC Part 15 (Class B), IC, ETSI	

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PART NUMBERS	DESCRIPTION
XKA2C-Z7T-U	XBee ZigBee Cloud Kit
XKA2C-Z7T-W	XBee ZigBee Cloud Kit (International)
X2E-Z3C-E1-A	XBee Gateway - ZigBee to Ethernet
X2E-Z3C-E1-W	XBee Gateway - ZigBee to Ethernet (International)
X2E-Z3C-W1-A	XBee Gateway - ZigBee to Ethernet/Wi-Fi
X2E-Z3C-W1-W	XBee Gateway - ZigBee to Ethernet/Wi-Fi (International)
X2E-Z4C-D2-A	XBee Gateway - ZigBee to Verizon 3G
X2E-Z4C-H1-A	XBee Gateway - ZigBee to GSM 3G (AT&T)
X2E-Z3C-H2-W	XBee Gateway - ZigBee to GSM 3G (International)
X2E-Z4C-D1-A	XBee Gateway - ZigBee to Sprint 3G

FOR MORE INFORMATION
PLEASE VISIT WWW.DIGI.COM

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