



ZIGBEE SMART ENERGY CERTIFIED IP GATEWAY



CONNECTPORT X2E[®] FOR SMART ENERGY

Gateway with the ZigBee Smart Energy Public Application Profile 1.1 provides low-cost, interoperable IP-to-application connectivity for customer engagement

ConnectPort X2e is an enhanced Smart Energy gateway optimized for large deployments of Smart Energy devices in a Home Area Network (HAN) including utility meters, thermostats and in-home displays.

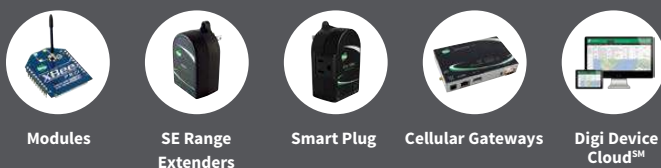
The wireless gateway provides a low-cost connection between Smart Energy devices and remote web applications or utility-hosted websites designed for consumer engagement and demand response. By sharing the homeowner's broadband internet connection, the wireless gateway provides near real-time energy data access and control capabilities based on the Smart Energy devices enabled in the customer's home.

The ConnectPort X2e for Smart Energy is available in two configuration options. The Coordinator version is intended for stand-alone Smart Energy networks that do not have smart meters present. The Router version is configured to connect and read the smart metering system which has been installed at the site.

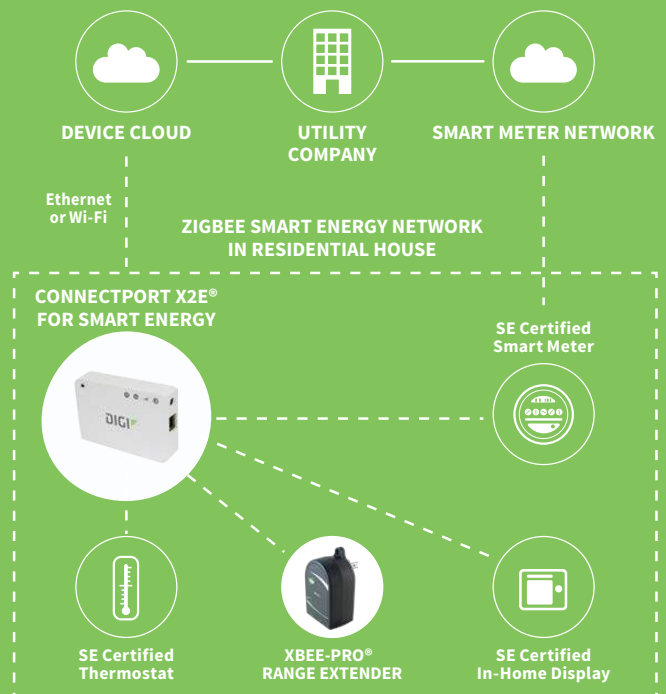
BENEFITS

- Full certification to ZigBee Alliance Smart Energy Public Application Profile 1.1 and backwards compatible to 1.0
- Ethernet, Wi-Fi and cellular options for flexible broadband connectivity
- Uses Digi Device CloudSM to manage connectivity, configuration and software upgrades as well as application integration via published APIs
- Supports both stand-alone Smart Energy networks and Smart Energy metering systems
- Enables the Home Area Network (HAN) and Smart Energy devices, such as Programmable Communicating Thermostat (PCT) and In-Home Display products from other manufacturers

RELATED PRODUCTS



APPLICATION EXAMPLE



SPECIFICATIONS

ConnectPort X2e® for Smart Energy

ConnectPort X2e® Cellular for Smart Energy

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	SSL tunnels, Cellular network security
ZIGBEE	XBee® ZB SMT transmit power 6.3 mW (+8 dBm); Receiver sensitivity (1% PER) -102 dBm	
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)
WEIGHT	0.15 lb (0.07 kg)	0.37 lb (0.082 kg)

DEVELOPMENT

ZIGBEE PUBLIC APPLICATION PROFILE	Smart Energy 1.1 (Backwards compatible to 1.0)	
PYTHON VERSION	2.7.1	
PROCESSOR AND MEMORY (VARIES BY FIRMWARE AND OS VERSION)	Freescale i.MX28, 20 MB RAM, 10 MB file space	

ETHERNET

PORTS	1 RJ-45 port	
PHYSICAL LAYER	10/100Base-T	
DATA RATE	10/100 Mbps (auto-sensing)	N/A
MODE	Full or half duplex (auto-sensing)	N/A
ROUTING	Ethernet port designed for WAN backhaul only	Ethernet port designed for configuration only

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 and channel)	N/A
RECEIVER SENSITIVITY	Up to -87 dBm @ 11 Mbps	N/A
MODES	AP Client Modes only; Access Point Mode not supported	N/A

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)	
ETHERNET ISOLATION	500 VAC min per IEEE802.3/ANSI X3.263	

REGULATORY APPROVALS

MOBILE CERTIFICATIONS (GSM)	N/A	AT&T
MOBILE CERTIFICATIONS (CDMA)	N/A	Verizon / Sprint
SAFETY	EN60950	
EMISSIONS/IMMUNITY	CE, FCC Part 15 (Class B), IC, ETSI	

PART NUMBERS	DESCRIPTION
X2K-Z1C-W1-A	Digi Smart Energy Developer Kit
X2E-Z1C-E1-A	ConnectPort X2e, ZigBee SE Coordinator, Ethernet
X2E-Z1C-E1-W	ConnectPort X2e, ZigBee SE Coordinator, Ethernet (International)
X2E-Z1R-E1-A	ConnectPort X2e, ZigBee SE Router, Ethernet
X2E-Z1R-E1-W	ConnectPort X2e, ZigBee SE Router, Ethernet (International)
X2E-Z1C-W1-A	ConnectPort X2e ZigBee SE Coordinator, Ethernet and Wi-Fi
X2E-Z1C-W1-W	ConnectPort X2e ZigBee SE Coordinator, Ethernet and Wi-Fi (International)
X2E-Z1R-W1-A	ConnectPort X2e ZigBee SE Router, Ethernet and Wi-Fi
X2E-Z1R-W1-W	ConnectPort X2e ZigBee SE Router, Ethernet and Wi-Fi (International)
X2E-Z1C-H1-A	ConnectPort X2e ZigBee SE Coordinator 3G GSM
X2E-Z1R-H1-A	ConnectPort X2e ZigBee SE Router 3G GSM
X2E-Z1R-D2-A	ConnectPort X2e ZigBee SE Router CDMA EVDO (Verizon)
X2E-Z1C-D1-A	ConnectPort X2e SE Coordinator EVDO (Sprint)
X2E-Z1R-D1-A	ConnectPort X2e SE Router EVDO (Sprint)
X2E-Z1C-D2-A	ConnectPort X2e ZigBee SE Coordinator CDMA EVDO (Verizon)

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