

ZIGBEE® NETWORK  
RANGE EXTENDER



# XBEE-PRO® ZB WALL ROUTER

The XBee-PRO ZB wall router is an easy-to-deploy, plug-in extender/router that expands the reach of ZigBee networks

Digi's XBee-PRO ZB wall router is a network extender used to create or expand a wireless ZigBee network, allowing seamless communication between ZigBee enabled devices. The wall router plugs into a standard power outlet for quick and easy deployment. Once deployed, the unit acts as a routing node, providing users with expanded network range and adding redundancy to a mesh network.

The wall router is built upon the extended-range XBee-PRO ZB module, giving users full interoperability with other XBee® ZB based devices. Additionally, the XBee ZB family of products utilizes the ZigBee PRO Feature Set (ZPFS), enabling network

interoperability with ZPFS products from other vendors.

Part of Digi's unsurpassed offering of Drop-in Networking products, the XBee-PRO ZB wall router provides seamless communication between devices, including embedded modules, device adapters and gateways. XBee ZB modules deliver wireless connectivity to end-point devices in ZigBee networks. XBee device adapters provide wireless connectivity to electronic devices in wired networks. ConnectPort® X gateways enable users to access and configure remote XBee devices in a network.

## BENEFITS

- Extends the range and strength of a ZigBee network
- Creates additional network pathways for more reliable mesh networking
- Plugs into a standard power outlet for easy deployment
- Small form factor for unobtrusive deployment
- Integrated light and temperature sensors
- Secure mounting tab prevents accidental unplugging and theft (North American unit only)

## RELATED PRODUCTS



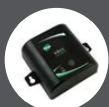
Gateways



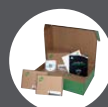
Modules



Adapters

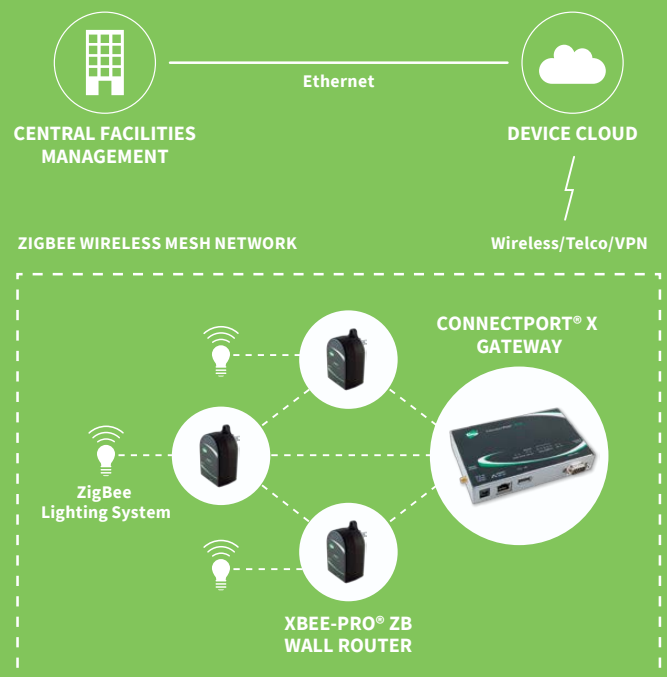


Sensors



Development  
Kits

## APPLICATION EXAMPLE



# SPECIFICATIONS

# XBee-PRO® ZB Wall Router

## PERFORMANCE

<b>RF DATA RATE</b>	250 Kbps
<b>INDOOR/URBAN RANGE</b>	Up to 300 ft (90 m) / 200 ft (60m) Int'l variants
<b>OUTDOOR/RF LINE-OF-SIGHT RANGE</b>	Up to 1 mile (1.6 km) / 2500 ft (750 m) Int'l variants
<b>TRANSMIT POWER</b>	50 mW (+17 dBm) / 10 mW (+10 dBm) Int'l variants
<b>RECEIVER SENSITIVITY (1% PER)</b>	-102 dBm

## FEATURES

<b>INTERFACES</b>	Network interoperable with ZigBee PRO Feature Set devices
<b>FREQUENCY BAND</b>	2.4 GHz (ISM)
<b>LEDS</b>	Power: Solid when external power is supplied Associate: Blinks when unit is connected and associated to an RF Network
<b>PUSH BUTTON</b>	Device reset, configuration reset to factory defaults, identification/commissioning mode
<b>ANTENNA OPTIONS</b>	Internal
<b>LOCKING MECHANISM</b>	Unit secures to power outlet using center outlet screw (U.S. only)

## INTEGRATED TEMPERATURE & LIGHT SENSOR

<b>TEMPERATURE SENSOR</b>	Range: 0° C to 70° C (32° F to 158° F) Accuracy: +/- 2° C
<b>AMBIENT LIGHT SENSOR</b>	Range of spectral bandwidth: 360 to 970 nm (similar to human eye); Wavelength of peak sensitivity: 570 nm

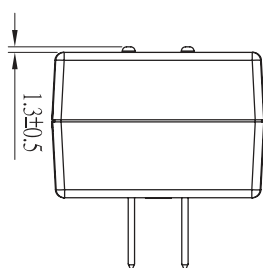
## GENERAL

<b>DIMENSIONS (L X W X H)</b>	2.87 in x 1.97 in x 1.37 in (7.30 cm x 5.00 cm x 3.50 cm)
<b>WEIGHT</b>	2.50 oz (70.87 g)
<b>POWER INPUT</b>	Universal AC input (85VAC to 265VAC)
<b>ENVIRONMENT (TEMPERATURE/LUX)</b>	0° C to 70° C (32° F to 158° F; sub 1200 lux)
<b>RELATIVE HUMIDITY</b>	5% to 95% (non-condensing)

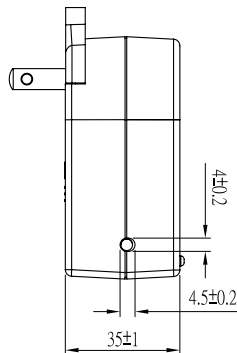
## REGULATORY APPROVALS

<b>FCC (USA)</b>	Yes
<b>IC (CANADA)</b>	Yes
<b>CE/ETSI (EUROPE)</b>	Yes, Int'l variant
<b>C-TICK (AUSTRALIA)</b>	Yes
<b>TELEC (JAPAN)</b>	Yes, Int'l variant

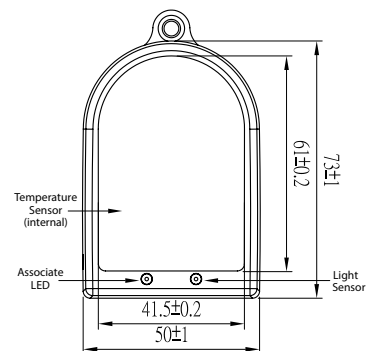
XBEE-PRO WALL ROUTER - TOP  
(NORTH AMERICA VERSION ONLY)



XBEE-PRO WALL ROUTER - SIDE



XBEE-PRO WALL ROUTER - FRONT



PART NUMBERS	DESCRIPTION
XR-Z14-CW1P1	XBee-PRO ZigBee Wall Router, US Power Plug
XR-Z14-CW1P2	XBee-PRO ZigBee Wall Router, EU Power Plug
XR-Z14-CW1P3	XBee-PRO ZigBee Wall Router, UK Power Plug
XR-Z14-CW1P4	XBee-PRO ZigBee Wall Router, Australia Power Plug
XR-Z14-CW1P5	XBee-PRO ZigBee Wall Router, Japan Power Plug