



# Quick Start Guide - ZBRE-U Model Zigbee Range Extender



#### **Product Brief**

The ZBRE provides the means to easily extend the range of your Zigbee devices as well as increase the strength of your Zigbee wireless network.

The built-in high power Zigbee radio joins the network as a router and then facilitates the joining of devices that may not be within range of the network. Use of the Zigbee standard ensures compatibility with the emerging standards for smart homes/buildings being deployed around the world.

### Installation

The ZBRE must be installed indoors or in a weather proof enclosure. The ZBRE USB stick can be attached to a computer or a USB adapter to plug directly to a wall.

#### **Reset to Factory Defaults**

- Press and hold the Program Button (located on the LED itself) while powering the ZBRE into a USB port and release after 1-2 seconds.
- The Status LED will blink rapidly indicating the ZBRE has been reset and is searching for an open network to join.

#### Set-up

#### **Ioin Network**

- Open a Zigbee router or network coordinator to permit joining of your ZBRE to the network.
- When the ZBRE has joined the network, the Status LED will stop flashing. If the Status LED remains flashing, the device is unable to join the network.

## **Open Permit Join**

In addition to extending the range of Zigbee devices, the ZBRE also serves as a router and allows other Zigbee devices to join the network. After the ZBRE has already joined the network (LED is solid *green*), proceed as follows:

- 1. Press and hold the Program Button for 6 seconds. The Status LED will begin to flash rapidly. The ZBRE will allow joining of other devices for up to 4 minutes.
- 2. Join the new Zigbee device to the network according to the join method of that device.
- 3. When the ZBRE has timed out for join permission, the Status LED will return to solid green.





Program Button Additional Operation				
<b>Desired Operation</b>	Action on Pushbutton	Device Behavior		
Leave Network	Press and hold for 15 seconds	Status LED will begin Fast Flashing		
Close Join	Press and hold for 3 seconds when device is in Open Join	Status LED will stop flashing		
Request New Firm- ware via OTA	Tap 6 times	LED will quick blip off, once every second while OTA update is in progress		
Soft Reset	Tap 10 times	LED will go out for about a second and then device will rejoin network		

Status LED Indication			
Pattern	Indication		
Fastest flashing	Joining/Rejoining network		
Flash once per second	Permit-Join mode		
Solid	Joined to network		
Two blips per second	Device cannot find "Parent Device" and/or network it was joined to		

HA Profile: (0x0104) Zigbee Device ID: 0x0008 (Range Extender)				
Cluster ID	Cluster Name	Client/Server	Cluster Description	
0x0000	Basic	Server	Attributes for determining basic information and setting and enabling device	
0x0003	Identify	Server	Attributes and commands for putting a device into Identification mode	