



# Quick Start Guide - 5010Na ZBPLM-PCM

ZigBee Router with Blue Line Power Cost Monitor™ Interface











# **Product Brief**

The ZBPLM-PCM receives energy information from a BlueLine Innovations PCM sensor and makes this information available to a ZigBee HA or INSTEON network.

This functionality allows energy consumption information from the utility meter to be utilized by ZigBee and INSTEON applications to monitor and automate energy efficiency.

# **ZigBee Set-up**

### 1) Reset ZBPLM-PCM

- 1) Press the Program Button on the ZBPLM-PCM while plugging it into a 120V AC receptacle and release button after 6 sec.
  - The ZBPLM-PCM should be plugged in within 30 feet of the meter
  - The Status LED will blink rapidly when successfully reset.

#### 2) Start/Join ZigBee Network

#### **ZBPLM-PCM** as Coordinator

1) Press Program Button for 6 seconds to start ZigBee HA network. Network will now allow ZigBee devices to join for up to 4 minutes.

#### **ZBPLM-PCM** as Router

- 1) Open Permit Join with a ZigBee HA Coordinator or Router to add the ZBPLM-PCM to the network.
  - After resetting the ZBPLM-PCM, the device will start scanning to find an open ZigBee HA network.

## **INSTEON Set-up**

#### 1) Enable for INSTEON only

- If ZigBee will not be used for your application, setup the ZBPLM-PCM in INSTEON-Only mode. Otherwise skip this step.
  - Press Program Button for 10 seconds and release. LED will be lit solid.
- 2) Link ZBPLM-PCM to INSTEON network according to instructions of your INSTEON controller

## **BlueLine Sensor Set-up**

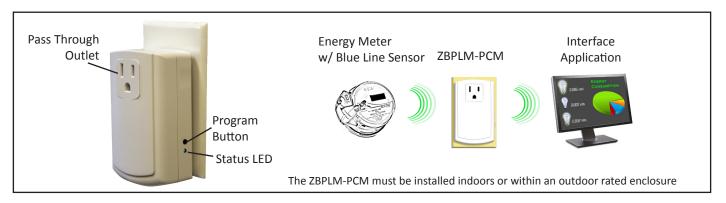
- 1) Set the kH factor on the ZBPLM-PCM
  - The kH factor will be displayed on your power meter.
  - Press Program Button for 3 seconds and release. LED will go out.
  - $\bullet\hspace{1.5pt}$  Tap Program Button to set kH according to kH table.
  - Press and hold Program Button for 3 seconds to complete. LED will blink to confirm number of taps.
- 2) Press the Reset button on the Blue Line Innovations PCM Sensor once.
  - LED on ZBPLM-PCM will blink twice each time it gets an energy consumption signal from the PCM sensor.
  - LED on PCM sensor will blink once each time it sends a signal.

Taps/ Blinks	Kh(Kt) Factor
1	1
2	1.8
3	3.6
4	7.2
5	10

kH Table







# Rejoin to ZigBee Network (Router)

If the ZBPLM-PCM loses power or needs to be moved to a new location, the device will rejoin the network automatically once power has been restored. The Status LED will flash fast until the device re-establishes communication with the network.

# **Re-Sync Sensor**

• Repeat Step-2 of Blue Line Sensor Set-up from page 1.

# **ZigBee Clusters**

HA Profile (0x0104)				Device ID: 0x0007 on EP1 - CID 0x0501 on EP2 - IAS
End Point	Cluster ID	Cluster Name	Client/ Server	Cluster Description
01	0000	Basic	Client/ Server	Attributes for determining basic information and settings
01	0003	Identify	Client/ Server	Attributes and commands for putting a device into Identification mode
02	0702	Simple Metering	Client/ Server	Provides mechanism to retrieve electric power usage