EnOcean to BACnet Gateway

BASGE-EN902

902 MHz (North American Version)

The EnOcean to BACnet Gateway provides the systems integrator with a flexible building block when integrating EnOcean wireless devices to BACnet/IP networks or expanding the number of EnOcean points in an existing building automation system. Thanks to virtual routing technology, our gateway seamlessly discovers and connects to EnOcean devices and makes them appear as individual BACnet-compliant devices. The gateway creates a set of BACnet objects, specific for each EEP, and decodes the received EnOcean data into standard BACnet objects, such as analog-inputs for temperatures, humidity, light levels, etc. and multistate objects for EnOcean values that represent multiple states, for easy integration to BACnet system - saving the head-end from decoding the transmitted EnOcean data.

- Bidirectional Gateway functionality between EnOcean Wireless and BACnet/IP
- EnOcean device discovery
- Remote commissioning of link tables and configuration settings
- Each EnOcean device appears as virtual BACnet device to aid in integration
- Received EnOcean data is decoded into standard BACnet objects
- No external tools required for configuration

Installation Guide

Electrical *(Class 2 Circuits Only)*

INPUT	DC	AC
Voltage (±10%):	24 V	24 V
Power:	3 W	6 VA
Frequency:	N/A	47-63 Hz

Environmental

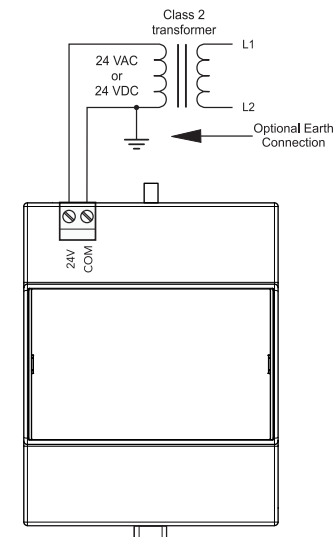|	
Operating temperature:	0°C to 60°C
Storage temperature:	–40°C to +85°C
Relative humidity:	10–95%, non-condensing

Functional — Physical Layer

Ethernet:	10BASE-T, 100BASE-TX
EnOcean:	902MHz
Cable length limit:	100 m
EnOcean distance:	30 m typically inside buildings
Ethernet LED:	flashing = activity at 10Mbps or 100Mbps

Antenna (sold separately)

BASGE-ANT902: EN902 stick antenna: 50 ohm, gain 0.86 dBi, efficiency 25%
BASGE-ANT902-2M: EN902 antenna w/ 2 m cable: 50 ohm, gain 0.68 dBi, fficiency 55%

Safety Information
FCCID: 2AU57BASGE-EN902
IC: 31004-BASGEEN902

Installation

Power Connection

The EnOcean to BACnet Gateway requires 24 VAC or 24 VDC while drawing no more than 6 VA of power. The recommended conductor size is 16–18 AWG. COM is directly connected to zero volts and the chassis is DC isolated from zero volts. Input connections are reverse-polarity protected. See figure for power options. The SMA connector supports a stick antenna (as shown in the product image) or an antenna with 2 m cable for mounting the antenna outside the control cabinet.

WARNING: Internally, this device utilizes a half-wave rectifier and therefore can only share the same AC power source with other half-wave rectified devices. Sharing a common DC power source is also possible. Sharing AC power with full-wave rectified devices is NOT recommended. Devices powered from a common AC source could be damaged if a mix of half-wave and full-wave rectified devices exists.

Class 2 transformer
L1
24 VAC or 24 VDC
L2
Optional Earth Connection
24V COM

Web Page Configuration

The EnOcean to BACnet Gateway contains an interactive web server accessible from any Internet-compatible PC on the local network with recent versions of most standard web browsers such as Microsoft Internet Explorer, Microsoft Edge, Mozilla Firefox, or Google Chrome installed.
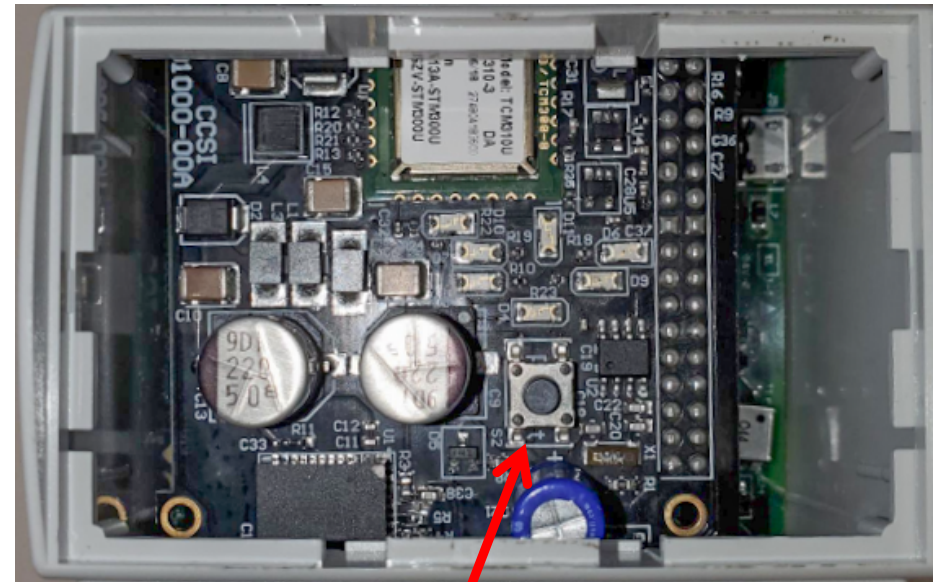
To configure the gateway initially, connect it to your Windows PC using an Ethernet cable and set the PC's IP and subnet mask in Local Area Connection –> Properties. In the Internet Protocol Version 4 (TCP/IPv4) settings of your Windows PC, specify an IP address and a Subnet mask in the same subnet as the gateway (e.g. 192.168.92.5 /24).

EnOcean to BACnet Gateway's *factory-programmed: Default IP address is* **192.168.92.68** *and a Class C subnet mask of* **255.255.255.0 (/24)**
User Name is: **admin** *and Password is:* **admin**

Reset IP Remove the top cover, locate the reset IP switch (see picture) and while the unit is powered press for 10 seconds. The unit will reboot, and you can access it via the IP address and user name/password defaults shown above. Please wait 30 seconds for the gateway to complete its booting process
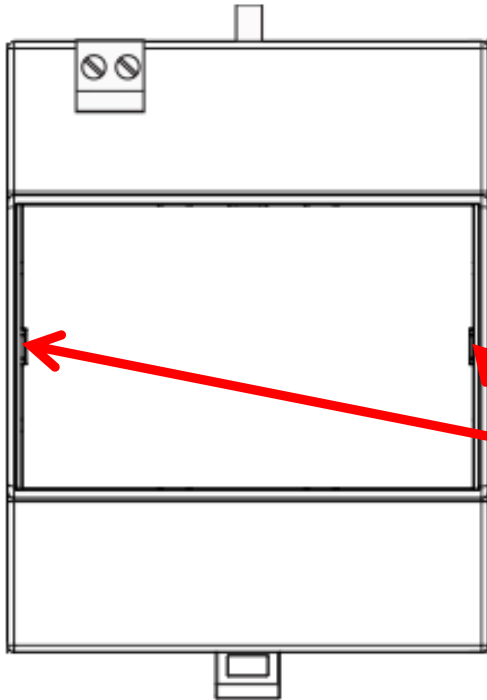
Reset IP

Use a flat head screwdriver at either of these two locations to take off the top cover.

RoHS✓

CE

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