

Optergy Air Wireless BACnet Gateway (WBG-1000)

The Optergy Wireless BACnet Gateway is a next-generation solution designed to enable seamless wireless communication with BACnet MS/TP devices—no Edge Controller required. This fully standalone gateway simplifies installation and operation, allowing you to connect, monitor, and integrate BACnet networks effortlessly and with speed.



OVERVIEW

We remove the complexity of connecting and integrating your air quality data. The Optergy Air range seamlessly communicates the required environmental information in a way that ensures reliability and excellent battery life. The WBG-1000 extends this functionality giving you the freedom to deploy, connect, and monitor devices independently, delivering greater flexibility and streamlined integration.

HARDWARE SPECIFICATIONS

Processor & Memory	ARM Cortex M4 180MHz 8 MB RAM 12 MB Flash Memory
Power	24 VAC, 24VDC Class 2 Trip Voltage: 40VAC/58VDC
Ethernet	2x 10/100 Mbps RJ45 Ports
Communications	BACnet IP, BACnet MS/TP, Modbus RTU
Radio Frequency	2.4 GHz
TX Power	20 dBm
RX Sensitivity	-96 dBm
Antenna Gain	2.1 dBm
Real Time Clock	Powered by on-board super capacitor up to 5 days, real-time clock supports schedules, trendlogs and timed automation functions.
Dimensions	6.0in (154mm) x 5.2in (132mm) x 1.5in (40mm)
Weight	256 grams
Mounting	Both screw and DIN rail mountable
Terminals	Removable terminals
Environment	-4°F (-20°C) to +140°F (+60°C) 0 to 95% RH (nc)

Ratings

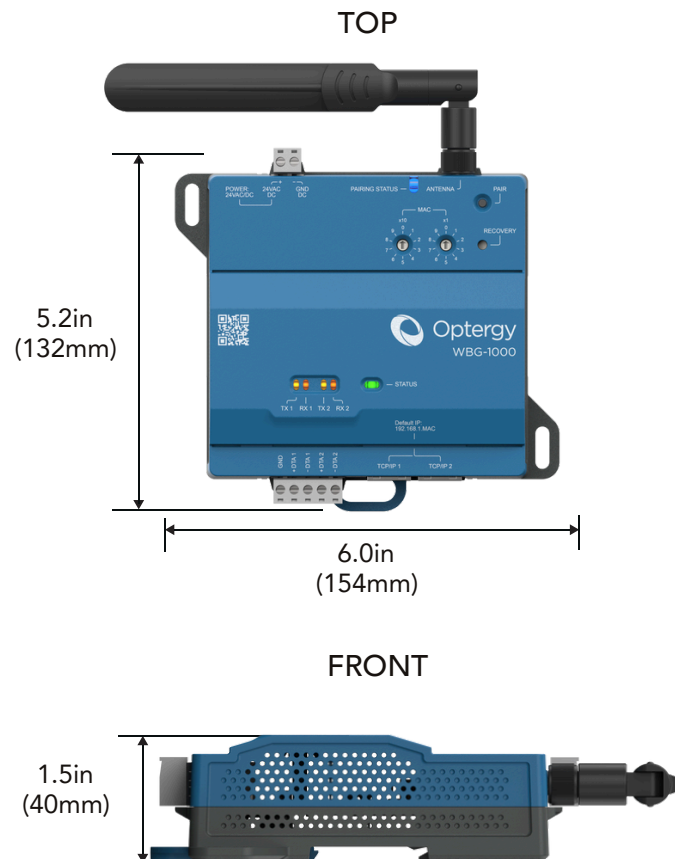


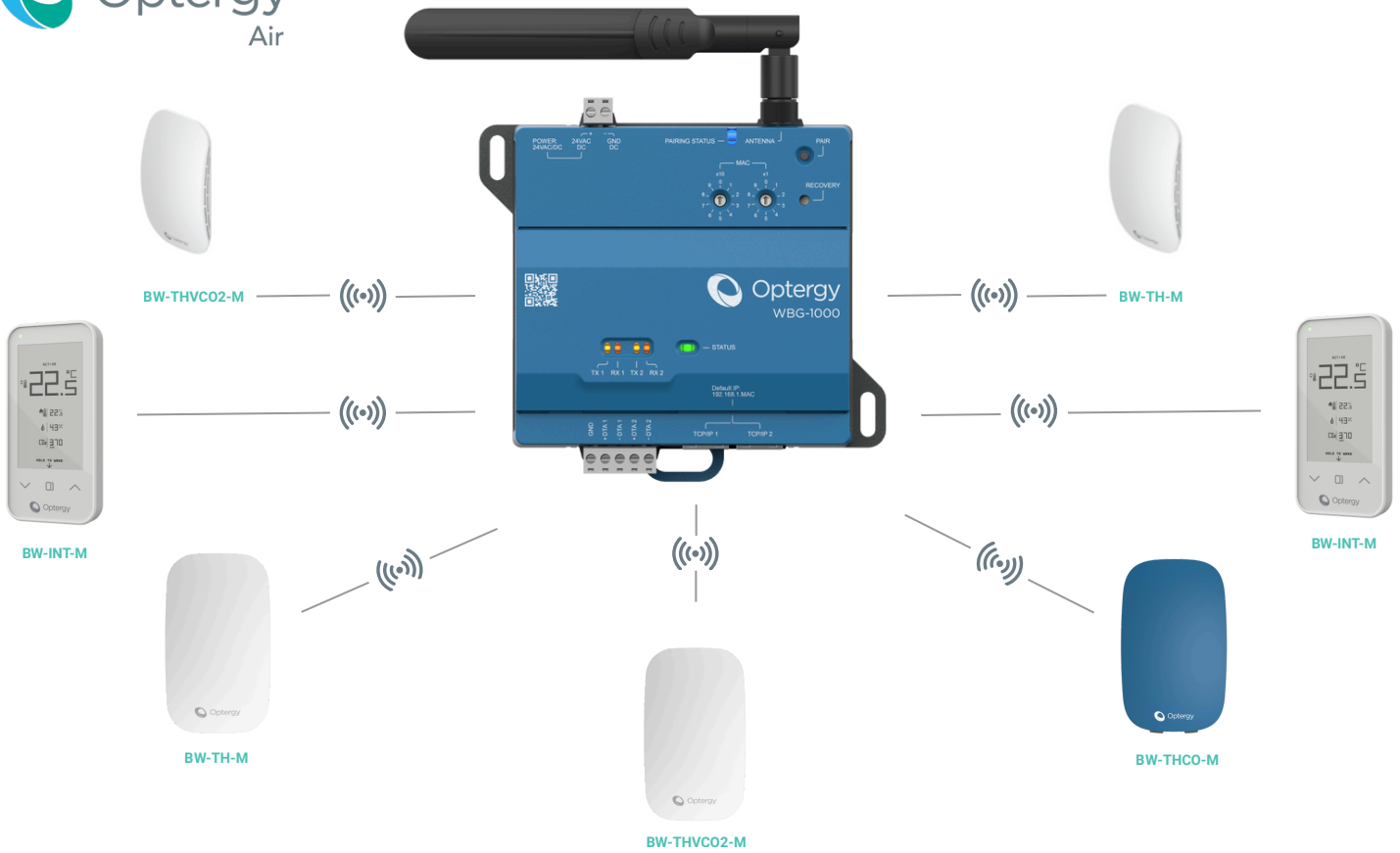
UL, FCC & CE: This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Purpose of Control: Energy Management
Construction of control: Independently Mounted Control for Surface Mount or DIN Rail
Impulse Voltage: 330V
Pollution Degree: 2
SELV Levels: 24V
Automatic action: Type 1 Action

- Up to seven Optergy Air wireless sensors can be connected to one WBG-1000 gateway.
- Quick & Easy Connection
- Reliable & Accurate Communication

DIMENSIONS



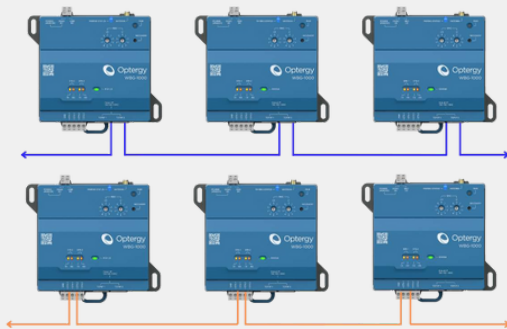


One Optergy Air Wireless BACnet Gateway (WBG-1000) is capable of connecting to a maximum seven wireless Optergy Air sensors.

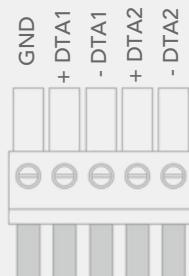
The WBG-1000 is also capable of connecting Optergy's new Plant controllers (BW-THCO-M) at ranges of up to 100m (for carpark applications).

OPEN PROTOCOL CONFIGURATION OPTIONS

- **BACnet IP** - Daisy Chain IP (10/100 Mbps)
- **BACnet MS/TP** - RS-485 (9.6kbps through 115.2kbps)
- **Modbus IP/RTU Gateway**



WIRING



Recommended wire size 28AWG - 16AWG.

View the Optergy Air WBG Installation Guide >>>

