



GW2 - Gateway

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Building automation's **missing link**™

Introduction

GW2 are powerful programmable controllers with embedded gateways and servers that allow building owners, facility managers, and contractors to deploy a 100% wireless building automation system (BAS) or to integrate wireless solutions to wired building automation systems. CAN2GO GW2 are interoperable with any BACnet IP BAS/BMS.

Applications

The GW2 is ideal for retrofits. It has an aesthetic look, similar to a router, allowing for in-room deployment. It supports control and gateway functionalities for wireless end-devices for the following applications:

- > HVAC room and zone control (actuators, thermostats, sensors, etc.).
- > Lighting room and zone control (switches, relays, sensors, etc.).
- > Access (i.e.: keycard readers, occupancy sensors, etc.).
- > Metering and sub-metering.

Control features

- > Programmability with real-time response when scripting.
- > Wireless control of EnOcean end-devices (128/128 I/O per GW2).
- > Wireless control of ZigBee end-devices (128/128 I/O per GW2).

Networking between units

- > Wireless - ZigBee wireless mesh network (self-forming/healing).
- > Wired - Daisy chain.
- > IP/Ethernet - Ethernet port.

Embedded gateway

- > EnOcean (wireless) to BACnet IP.
- > ZigBee (wireless) to BACnet IP.

Embedded web server hosting the CAN2GO web BMS

The GW2 hosts the CAN2GO web building management system. The CAN2GO web BMS is license-free and provides an easy way to discover and configure wireless end-devices. It also supports scripting and offers typical BMS features such as trend logs, events, schedules, maps/floorplan importing, etc.

Overview

Power

- > 400MHz processor
- > 64MB of RAM
- > 2GB Flash

Networking

- > Ethernet connector for BACnet Ethernet/IP connectivity
- > 802.15.4 wireless mesh
- > Wired serial bus for daisy-chain

Third party interoperability

- > BACnet
- > EnOcean (wireless)
- > Zigbee (wireless)
- > CANbus

Wireless integration

- > Embedded web BMS for simple discovery and configuration of wireless end-devices

Other

- > Real-time clock



Specifications GW2 - Gateway

POWER

Voltage - 24VAC; ± 15%; 50/60HZ; Class 2.
- 24VDC ± 10%

Typical Consumption - 3 VA + Output (VAC)
- 1.2W + Output (VDC)

GENERAL

Processor ARM9 32-bit
Memory 64Mb RAM
Storage 2Gb Flash
Real-time clock Battery backed (10,000 hours)
Communication - Zigbee Pro, EnOcean, BACnet
- CANbus (125-500 Kbps)
- Ethernet (10/100 Mbps)

ENCLOSURE

Material Rigid ABS
Dimensions 191mm (7.52 in) X 116mm (4.57 in)
Rating UL940-5VA
Mounting Wall or ceiling mount

ENVIRONMENTAL

Operating Temperature 0°C (32°F) to 60°C (140°F)
Storage Temperature -20°C (-4°F) to 60°C (140°F)
Relative Humidity 0 to 90% non-condensing

AGENCY APPROVALS

Energy Management Equipment, UL 916, Fourth Edition, December 23, 1998, rev. December 17, 2007
CSA Standard for Signal Equipment C22.2 No. 205-M1983 (R2004)
CFR47 FCC Part15, Subpart B:2009
ICES-003: Issue 4 (2004)
CE

SOFTWARE

Type Embedded web interface
Local installation None necessary
PDA/Smartphone compatible Yes
Browser compatibility Firefox 3.6 and 4.0

ENOCLEAN TRANSCIEVER (OPTIONAL)

Frequency 315.0 MHz or 868.3 MHz
Receiver Sensitivity -95dBm
Conducted Output Power 5dBm
Range Up to 300m/1000ft. open air /
Up to 30m/100ft. in building
Antenna - 15 cm wire
- (Optional) External whip, RP SMA0dBi

ZIGBEE TRANSCIEVER (OPTIONAL)

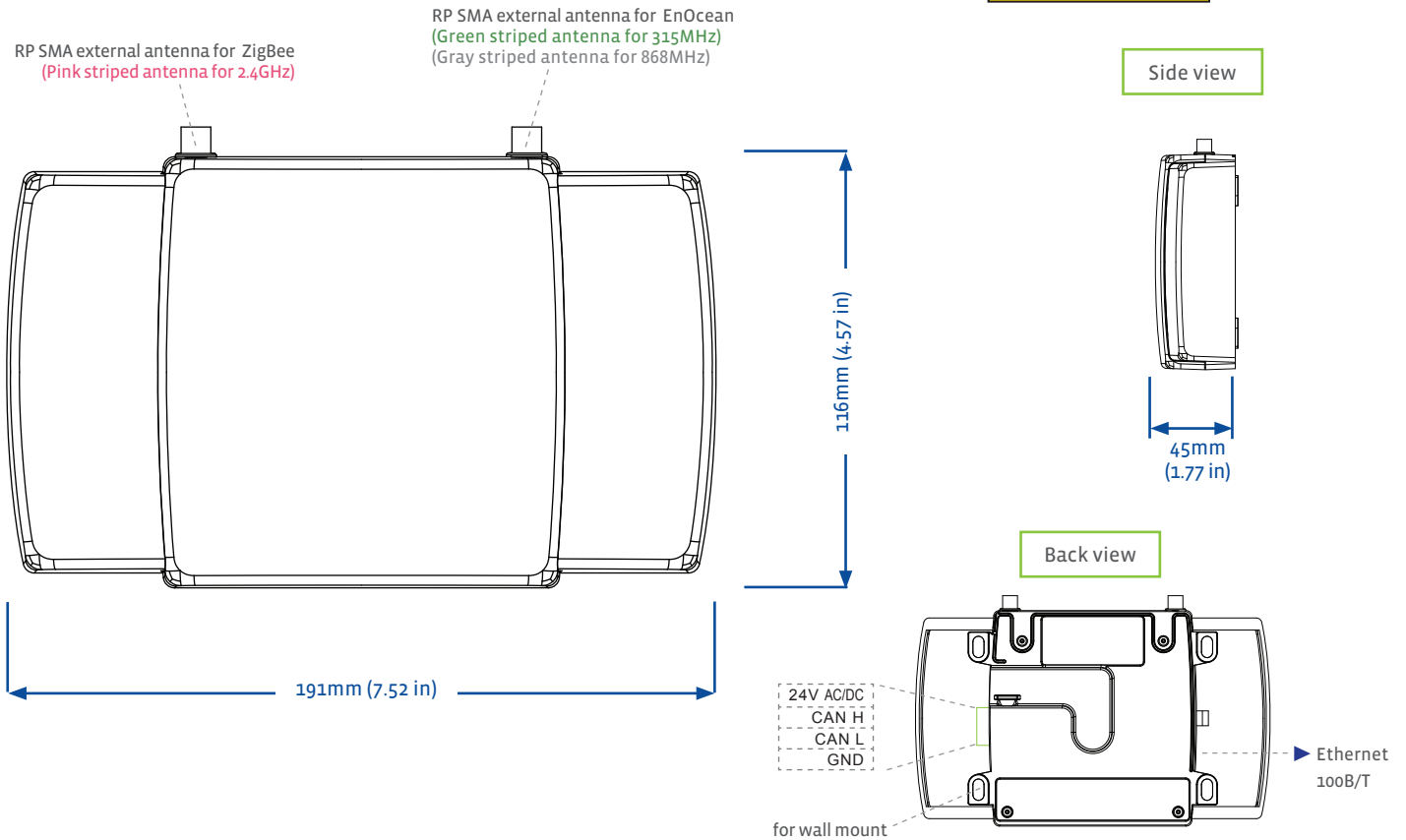
Frequency 2400 – 2483.5 MHz, 16 RF channels
Data rate / Mod. type 250 Kbps
Receiver Sensitivity -101dBm / -105dBm (amplified)
Nominal Output Power 8dBm / 18dBm (amplified)
Encryption AES 128 bit
Range Up to 1000m/3000ft. open air /
Up to 300m/1000ft. in building
Antenna - Internal
- (Optional) External whip, RP SMA 2.5dBi



Dimensions & Wiring

GW2 - Gateway

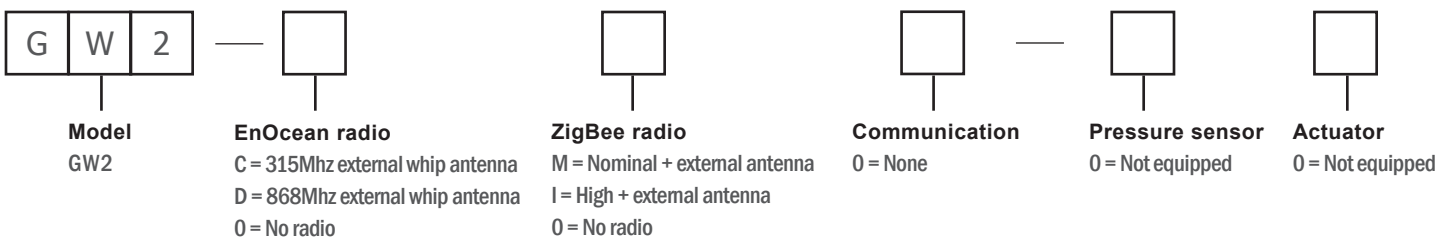
! IMPORTANT !
NEW PINOUT



Ordering information

Model: GW2 - Universal controller

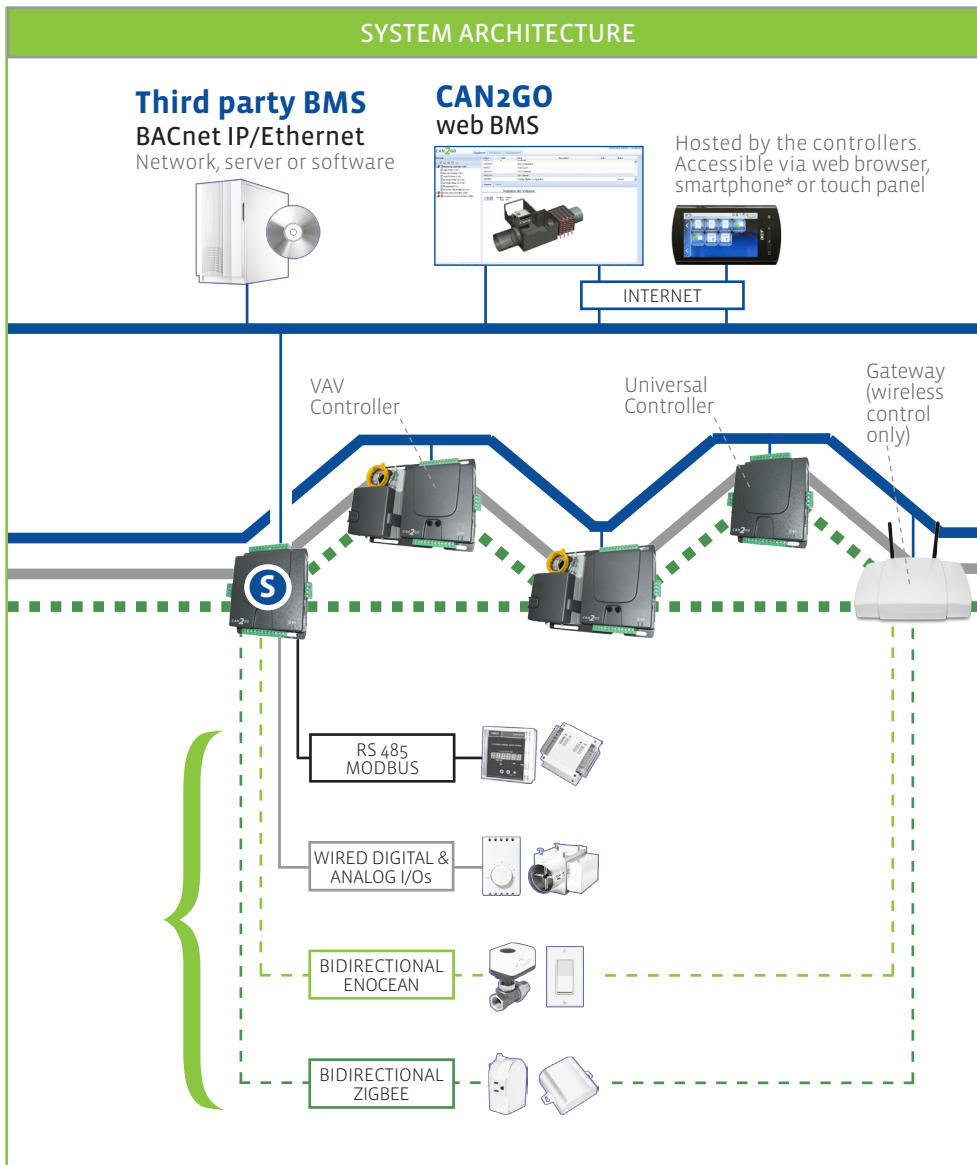
Code all blocks in table.





CAN2GO System architecture

CAN2GO controllers & gateways can be used as stand-alone programmable controllers with a front-end interface, and as an extension to third party BACnet IP/Ethernet building automation systems.



*Contact us to verify compatibility

INTERFACE

CAN2GO web BMS
Using a web browser, smartphone* or touch panel interface, the interface is accessible via the local area network (LAN) or online through a secure virtual private network (VPN). It offers centralized control, monitoring and local programming of each controller.

CONTROLLERS

S Server
The controller is the server. Connect one to the LAN to access the CAN2GO web BMS and manage your entire network.

Gateway
The controller is the gateway. Conversion of end-devices into BACnet objects is performed by the controllers. They are equipped with embedded BACnet gateways.

Models & Applications
CAN2GO offers a variety of controller models including the Universal, VAV and Gateway controllers. They are fully programmable with local storage and can manage all types of HVAC, lighting and metering applications.

End-devices
CAN2GO controllers can manage EnOcean, ZigBee, Modbus and wired end-devices, for multiple applications, all at the same time.

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