



## Automation Engine: Controller (eBCON-2)

### Description

The enteliBUS controller (eBCON-2) is a fully programmable native BACnet® building controller. The controller supports multiple communications methods including, as standard, BACnet/IP, BACnet over Ethernet, BACnet MS/TP, and Delta LINKnet.

The controller integrates the functions of the enteliBUS manager and the enteliBUS expander into a single compact module. This single module contains the primary CPU, memory storage, external communication ports, and direct I/O control for up to 4 enteliBUS I/O modules.

The eBCON-2 comes bundled with a backplane that holds up to 4 I/O modules. A connector on the backplane allows you to connect up to 8 backplanes (and associated I/O modules), all of which can be controlled from a single eBCON-2 controller.



### Features

- ▶ **Native BACnet firmware**
- ▶ **Fully programmable in GCL+**
- ▶ **BACnet Ethernet, BACnet/IP, and BACnet MS/TP communication ports**
- ▶ **Modular, expandable I/O**
- ▶ **Advanced fault detection and diagnostics**
- ▶ **Firmware upgrade and database load/save over the network**
- ▶ **LED status indications of power/scan and communication ports**
- ▶ **Small footprint, DIN rail mountable**
- ▶ **Modular design provides flexibility, ease of service, and reduced cost for future upgrades**

### Application

Used together with enteliBUS I/O modules, the eBCON-2 is a small footprint controller perfect for applications with limited mounting space. It can be expanded with additional backplanes/modules for high density I/O applications.

### Specifications

#### BACnet Device Profile

**BACnet Building Controller (B-BC)**  
**BACnet Gateway (B-GW)**

#### Mounting

**Backplane:** Snap mounts to standard 35 mm DIN rail  
**eBCON-2:** Snap mounts to backplane and DIN rail assembly

#### Device Type/Addressing Software addressed

#### Connectors

**Removable screw-type terminal connectors**

#### Wiring Class

**Class 2 / SELV**

#### Power

**24 VAC 50/60 Hz @ 6 VA, 100 VA max with fully loaded I/O modules\***

\*eBCON-2 supplies power for up to 4 I/O modules via the controller backplane

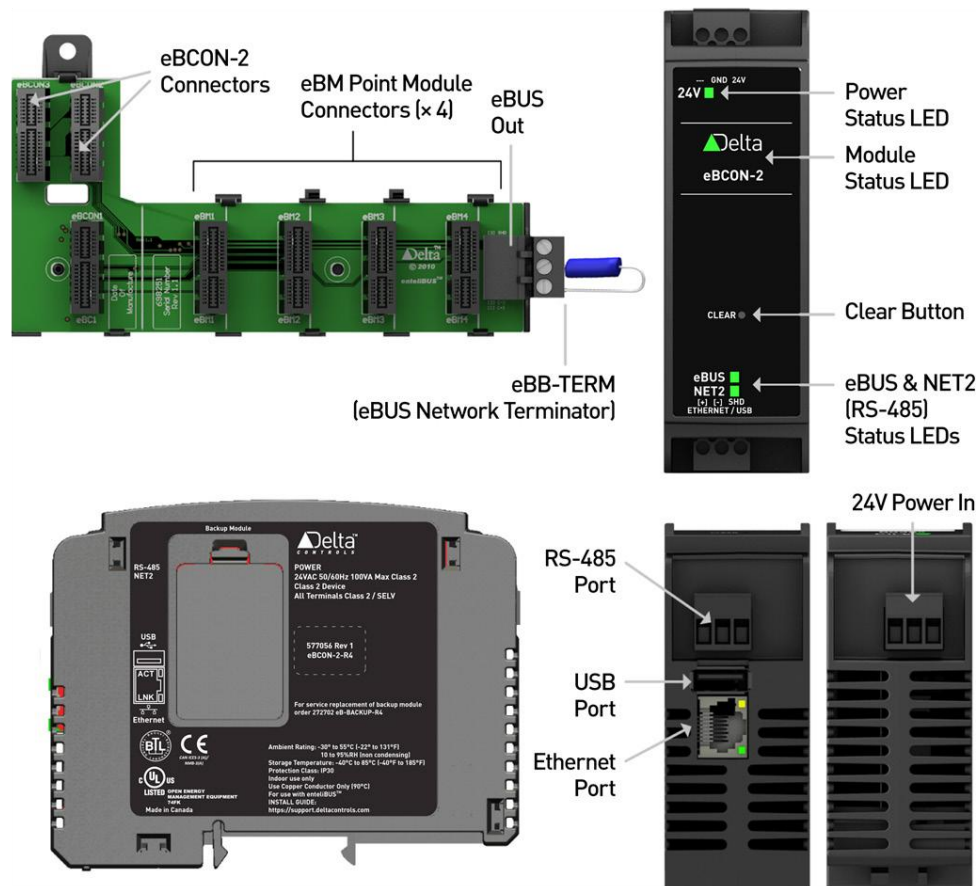
#### Technology

**Arm® Cortex®-A8 CPU**  
**256 MB SDRAM memory**  
**4 GB flash memory**  
**Real-time clock (temperature compensated)**  
**Supercapacitor power backup for RTC and memory**

#### Communication Ports

**Ethernet (10/100-BaseT)**  
**BACnet/IP, BACnet over Ethernet protocols supported**  
**1 RS-485 port (up to 76800 bps)**  
**BACnet MS/TP, Delta LINKnet, and Modbus® protocols supported**  
**USB host port**

## eBCON-2: Layout



### Specifications (Continued)

Ambient Rating  
**-30°C to 55°C (-22°F to 131°F)**  
**10% to 95% RH (non-condensing)**

Dimensions  
**126 x 145 x 100 mm (5.0 x 5.7 x 4.0 in.)\*\***  
**\*\*Dimensions given are for eBCON-2 package with controller backplane**

Weight  
**372 g (0.820 lb)**

Enclosure Protection Rating  
**IP30**

Compliance  
**CE**  
**FCC**  
**EAC**

Listings  
**C-UL Listed**  
**UL 916 Listed**  
**BTL Listed**



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### Ordering

Order the eBCON-2 according the following product number:

eBCON-2	enteliBUS controller w/ 4-slot controller backplane
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### Accessories

See online ordering for a complete list of all enteliBUS modules and accessories.

eBX-04	enteliBUS expander—I/O expander with 4-slot expander backplane
eBX-08	enteliBUS expander—I/O expander with 8-slot expander backplane
eBM-D400R4	enteliBUS I/O module with 4 digital inputs and 4 relay outputs
eBM-D800	enteliBUS I/O module with 8 digital inputs
eBM-404	enteliBUS I/O module with 4 universal inputs and 4 24 VAC TRIAC outputs
eBM-440	enteliBUS I/O module with 4 universal inputs and 4 0-10 VDC outputs
eBM-440-M	enteliBUS I/O module with 4 universal inputs, 4 0-10 VDC outputs with 3-position (HAO) override switches and 0% to 100% override adjust levers
eBM-800	enteliBUS I/O module with 8 universal inputs

Subject to change without notice.