

enteliBUS®

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.



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.

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

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
24 VDC, 100 W max output fully loaded

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, BACnet/SC* protocols supported

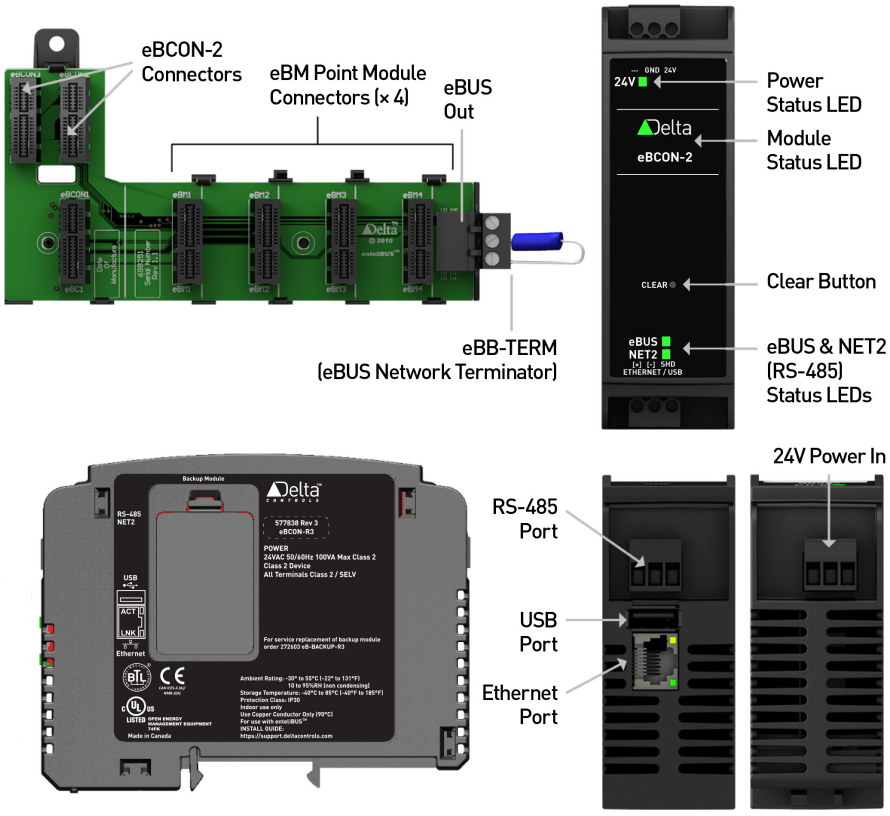
1 RS-485 port (up to 76800 bps)
BACnet MS/TP, Delta LINKnet, and Modbus® protocols supported

USB host port

* BACnet/SC requires V4.11 firmware that is currently being approved by BACnet Testing Laboratories (BTL).

enteliBUS®

eBCON-2: Layout



Ordering

Order the eBCON-2 according the following product number:

eBCON-2**	enteliBUS controller w/ 4-slot controller backplane

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

** UL 864 versions only available with first-generation eBMGR and eBCON controllers.

Specifications (Continued)

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

Dimensions
126 × 145 × 100 mm (5.0 × 5.7 × 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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Subject to change without notice.

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