

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

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



enteli<mark>BUS®</mark>

eBCON-2: Layout



Ordering

Order the eBCON-2 according the following product number:

enteliBUS controller w/ 4-slot controller backplane

Accessories

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

eBM-800	enteliBUS I/O module with 8 universal inputs
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-440	enteliBUS I/O module with 4 universal inputs and 4 0–10 VDC outputs
eBM-404	enteliBUS I/O module with 4 universal inputs and 4 24 VAC TRIAC outputs
eBM-D800	enteliBUS I/O module with 8 digital inputs
eBM-D400R4	enteliBUS I/O module with 4 digital inputs and 4 relay outputs
eBX-08	enteliBUS expander—I/O expander with 8-slot expander backplane
eBX-04	enteliBUS expander—I/O expander with 4-slot expander backplane

Specifications (Continued)

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

Dimensions

 $126\times145\times100$ mm (5.0 \times 5.7 \times 4.0 in.)** **Dimensions given are for eBC0N-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



enteliBUS is a registered trademark of Delta Controls Inc. Arm and Cortex are registered trademarks of the Arm Limited (or its subsidiaries) in the US and/or elsewhere. BACnet is a registered trademark of the American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.

Updated 16 April 2020_r

Subject to change without notice.



Copyright © 2020 Delta Controls. All rights reserved.