enteliBUS

Automation Engine: Controller (eBCON)

Description
The enteliBUS® Controller (eBCON) 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 Controller comes bundled with a controller Backplane that holds up to 4 I/O Modules. A connector on the Backplane allows for further I/O expansion. Up to 8 Backplanes (and associated I/O Modules) can be controlled from a single enteliBUS Controller module.

Application
The enteliBUS Control System is made up of multiple modular components that you select to meet the exact needs of a wide range of HVAC and Access control applications.

The enteliBUS Controller, with associated I/O Modules, provides a small footprint controller perfect for applications with limited mounting space. It can be used as a low density distributed controller, or 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 comm. ports

▶ Modular, expandable I/O

▶ Advanced fault detection & diagnostics

▶ SD card memory expansion

▶ Firmware upgrade & 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)

Technology
ARM9 32-bit RISC CPU
64MB Flash memory
32MB SDRAM memory
SD/SDIO card slot for memory expansion
Real-time clock (temperature compensated)
Ultracap power backup for RTC and memory
LED indication of CPU and scan status

Communication Ports
Twisted Pair Ethernet (10/100)
BACnet/IP & BACnet over Ethernet protocols supported

RS-485 Port (up to 76800 bps). BACnet MS/TP and Delta LINKnet protocols supported

USB Host Port

Device Type/Addressing
BACnet address set via software

Connectors
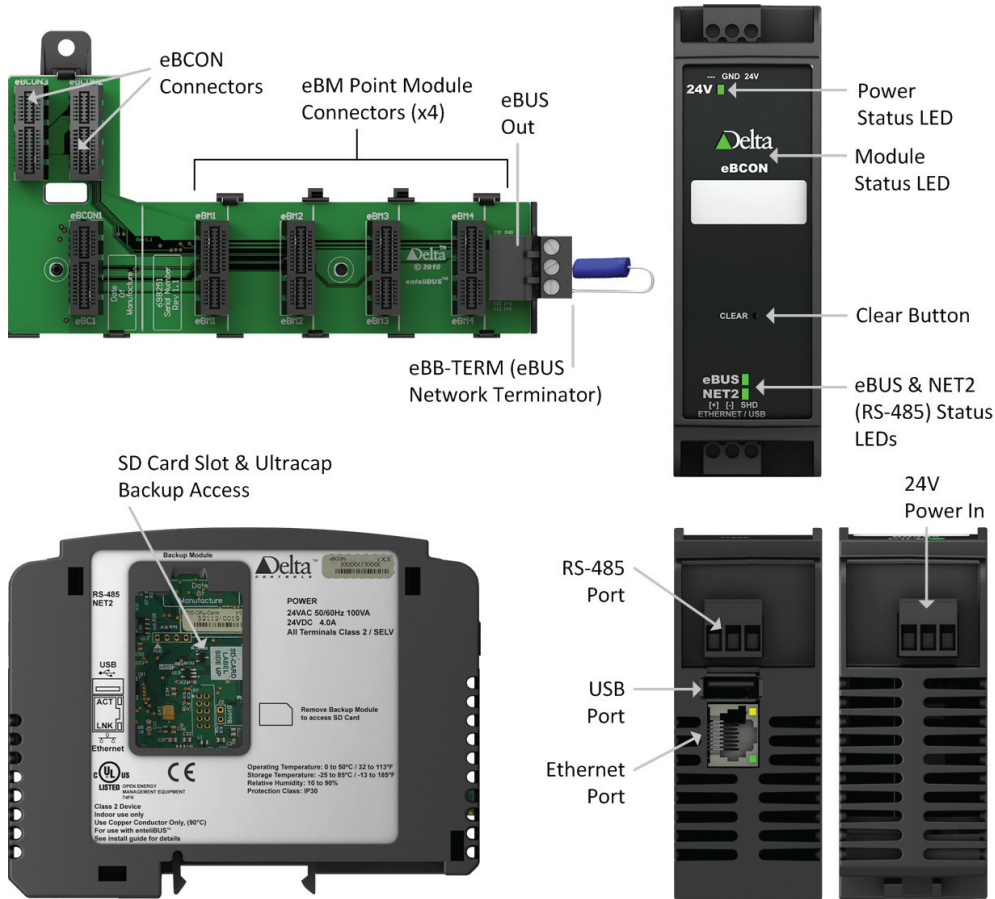Removable screw-type terminal connectors

Wiring Class
Class 2 / SELV

Power
24 VAC/DC
6 VA, 100 VA max with fully loaded I/O Modules*

*eBCON supplies power for up to 4 I/O Modules via the Controller Backplane

Delta CONTROLS™

enteliBUS

eBCON: Board Layout

eBCON Connectors
eBM Point Module Connectors (x4)
eBUS Out
eBB-TERM (eBUS Network Terminator)
SD Card Slot & Ultracap Backup Access

Power Status LED
Module Status LED
Clear Button
eBUS & NET2 (RS-485) Status LEDs
24V Power In
RS-485 Port
USB Port
Ethernet Port

Specifications (Continued)

Ambient
0° to 55°C (32° to 131°F)
10-95% RH (non-condensing)

Dimensions
eBCON*
12.6 x 14.5 x 10.0 cm (5.0 x 5.7 x 4.0 in.)
372 g (0.820 lb)

*Dimensions given are for eBCON package with associated controller Backplane.

Mounting
Backplane: Snap mounts to standard 35mm DIN rail eBCON: Snap mounts to Backplane & DIN rail assembly

Enclosure Protection Rating
IP30

Compliance
CE
FCC

Listings
UL 916
BTL

Ordering

eBCON	enteliBUS Controller w/ 4-slot Controller Backplane

Accessories
(See enteliBUS Parts List for a complete list of all available enteliBUS modules and accessories)

eBM-xxx	enteliBUS I/O Modules, see enteliBUS Parts List for a list of available modules

Subject to change without notice.