## $>$ enteliBUS ${ }^{\circledR}$

## Automation Engine: Controller (eBCON-2)

## Description

The enteliBUS controller (eBCON-2) is a fully programmable native BACnet ${ }^{\circledR}$ 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 $4 \mathrm{I} / \mathrm{O}$ modules. A connector on the backplane allows you to connect up to 8 backplanes land 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
$B A C n e t$ Building Controller ( $\mathrm{B}-\mathrm{BC}$ )
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 $50 / 60 \mathrm{~Hz}$ a $6 \mathrm{VA}, 100 \mathrm{VA}$ max with fully loaded I/O modules*
*eBCON-2 supplies power for up to 4 I/O modules via the controller backplane

## Technology

Arm ${ }^{\circledR}$ Cortex ${ }^{\oplus}$-A8 CPU
256 MB SDRAM memory
4 GB flash memory
Real-time clock Itemperature 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 ${ }^{\circledR}$ protocols supported
USB host port

## enteliBUS ${ }^{\circledR}$

## 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, $40-10$ VDC outputs with <br> $3-p o s i t i o n ~(H A O) ~ o v e r r i d e ~ s w i t c h e s ~ a n d ~ 0 \% ~ t o ~ 100 \% ~ o v e r r i d e ~ a d j u s t ~ l e v e r s ~$ |
| eBM-800 | enteliBUS I/O module with 8 universal inputs |

## Specifications (Continued)

Ambient Rating
$-30^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}\left(-22^{\circ} \mathrm{F}\right.$ to $\left.131^{\circ} \mathrm{F}\right)$
$10 \%$ to $95 \%$ RH (non-condensing)
Dimensions
$126 \times 145 \times 100 \mathrm{~mm}(5.0 \times 5.7 \times 4.0 \mathrm{in}$.)**
**Dimensions given are for eBCON-2 package with controller backplane

Weight
$372 \mathrm{~g}(0.820 \mathrm{lb})$
Enclosure Protection Rating
IP30
Compliance
CE
FCC
EAC
Listings
C-UL Listed
UL 916 Listed
BTL Listed

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