enteliBUS®

Automation Engine: Manager (eBMGR)

Description

The enteliBUS Manager (eBMGR) is a fully programmable native BACnet® Building Controller. It supports multiple communications methods including, as standard, BACnet/IP, BACnet over Ethernet, BACnet MS/TP, and Delta LINKnet.

The Manager is the automation engine of the enteliBUS Control System. It contains the primary CPU, memory storage, and external communication ports. The Manager also provides the control logic for enteliBUS I/O expansion backplanes.

An optional integrated LCD touchscreen provides local interface capabilities for viewing, modifying and configuring local I/O, variables, alarms, alarm logs and schedules.

Application

The eBMGR has multiple applications. By itself, it is a powerful system manager and BACnet router. With expansion backplane(s) attached, the eBMGR functions as an expandable I/O controller.

Use the enteliBUS Control System in low to medium density I/O applications to control a single piece of equipment, such as an AHU or chiller. Use it in high density I/O applications to control an entire mechanical room or central plant.

The eBMGR can also be used as an intelligent controller for a Delta access control system. The eBMGR contains enough memory to hold 50,000 card user database, and can manage up to 24 single- direction doors when used with 12 ADM-2W704 controllers.

Features

▶ Native BACnet firmware

▶ Fully programmable

▶ BACnet/Ethernet, BACnet/IP and BACnet MS/TP communication ports

▶ Integrated LCD touch-screen interface (optional)

▶ Modular, expandable I/O

▶ Advanced fault detection and diagnostics

▶ Firmware upgrade and database load/ save over the network

▶ LED status indications of power, CPU Scan and Ethernet 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)

LCD Touch-screen (Optional)
4.3 in. Active Matrix touch-screen
16-bit color, 480 x 272 resolution

Mounting
Snap mounts to standard 35 mm DIN rail

Device Addressing
Software addressed

Connectors
Removable screw-type terminal connectors

Wiring Class
Class 2 / SELV

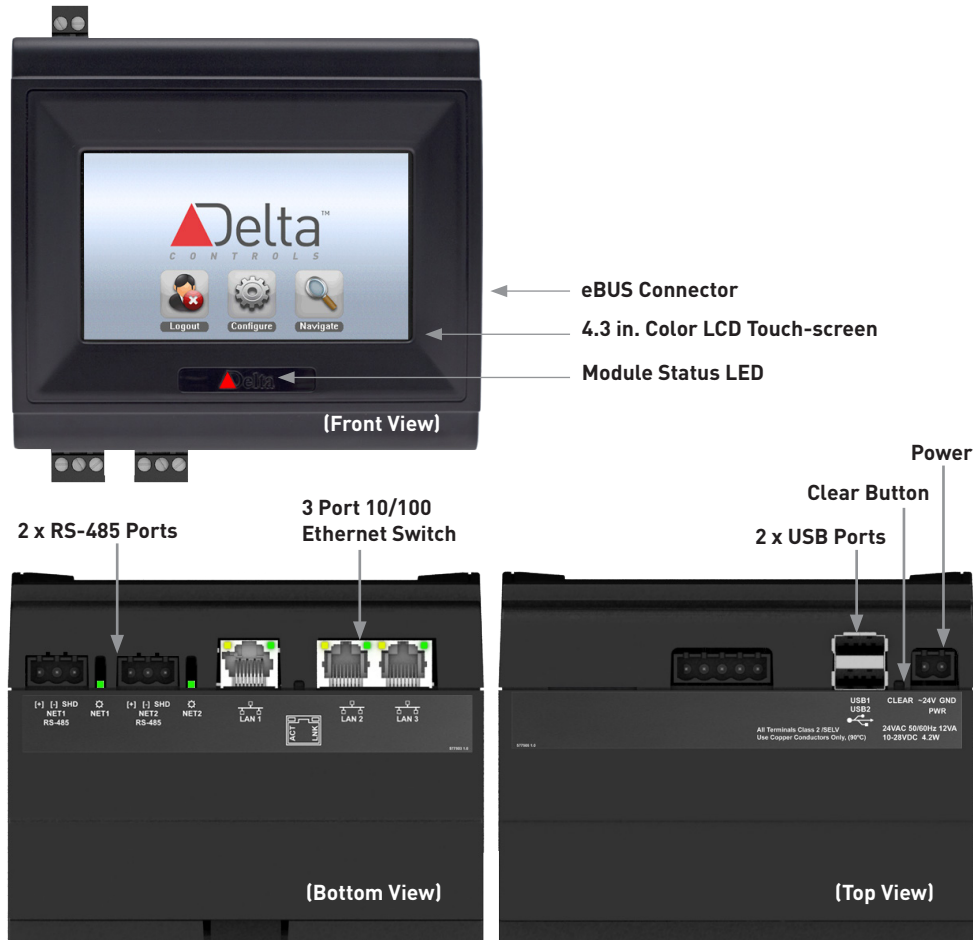**Power**
24 VAC 50/60Hz @ 12 VA
10-28 VDC, 4.2 W

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BACnet is a registered trademark of the American Society of Heating, Refridgerating and Air-Conditioning Engineers, Inc.

Updated January 2020_r

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eBMGR: Board Layout Diagram

(Front View)
- eBUS Connector
- 4.3 in. Color LCD Touch-screen
- Module Status LED

(Bottom View)
- 2 x RS-485 Ports
- 3 Port 10/100 Ethernet Switch

(Top View)
- Power
- Clear Button
- 2 x USB Ports

Ordering
Order the eBMGR according to the following product numbers:

eBMGR	enteliBUS Manager—CPU/ Comm. module
eBMGR-TCH	enteliBUS Manager—CPU/Comm. module with touch-screen LCD
eBMGR-UL864-340	enteliBUS Manager—CPU/ Comm. module, UL 864 Listed

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

eBM-xxx	enteliBUS I/O modules*
eBX-04	enteliBUS Expander—I/O expander with 4-slot expander backplane*
eBX-08	enteliBUS Expander—I/O expander with 8-slot expander backplane*

* UL 864 versions available

Specifications (Continued)

Technology
ARM9 32-bit RISC CPU
64 MB flash memory
32 MB SDRAM memory
Internal SD/SDIO card slot
Real-time clock (temperature compensated)
Ultracap power backup for RTC and memory

Communication Ports
3 Port 10/100 Ethernet Switch
BACnet/IP and BACnet over Ethernet protocols supported

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

2 USB host ports

Ambient for eBMGR
-30° to 55°C (-22° to 131°F)
0° to 55°C (32° to 131°F) for UL 864 product numbers
10 to 95% RH (non-condensing)

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

Dimensions
14.5 x 14.0 x 10.0 cm (5¾ x 5½ x 4 in.)

Weight
eBMGR 214 g (0.472 lb)
eBMGR-TCH 395 g (0.871 lb)

Enclosure Protection Rating
IP30

Compliance
CE
FCC
EAC

Listings
UL 916 Listed
UL 864 Listed for UL 864 product numbers
BTL Listed

Subject to change without notice.

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