



Description

The OPEN 600 EMS (Energy Management Station) is designed as a native BACnet controller. It supports the BACnet protocol acc. to the ANSI /ASHRAE standard with up to 250 BACnet objects.

The OPEN 600 EMS is tested acc. to DIN EN 16484-6 and BTL/WSP Lab Test Plan, certified to the rules by BACnet Interest Group Europe and BTL listed. It has got the AMEV attestation with B profile in the extended version.

The OPEN 600 EMS is equipped with 32 integrated in- and outputs and can be extended with up to 5 additional IO modules accord. to the version. The OPEN 600 EMS can be ordered with and w/o manual control.

It can be connected directly to the analog inputs **sensors** with the measurement elements **10mV/K, Pt1000, Ni1000 DIN** and **Ni1000 TK5000** as the analog inputs have integrated transducers. The OPEN 600 EMS supports up to 112 physical data points.

Technical Information

BACnet – functionalities

The OPEN 600 EMS supports the BACnet Device Profile „BACnet Building Controller (B-BC)“. It can be used concurrent as a BACnet Server, BACnet Client and BACnet Router.

Following Data-LinkLayers can be used simultaneously:

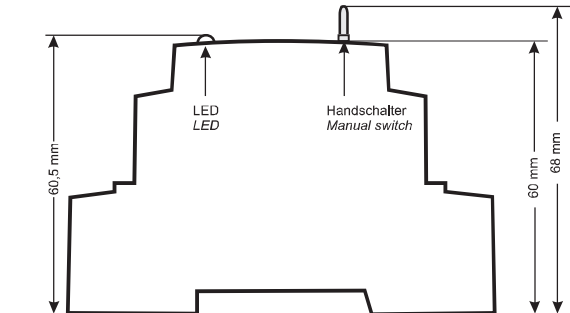
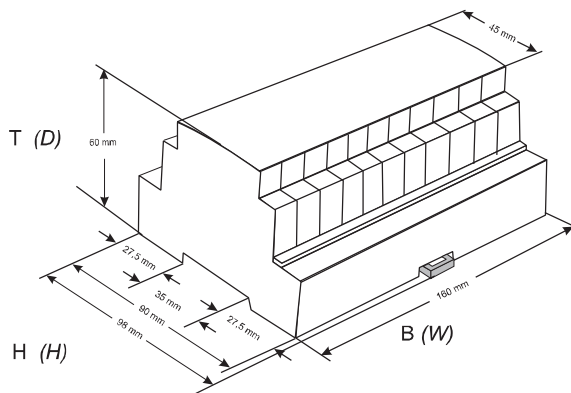
- BACnet / IP
- BACnet MS/TP Master
- BACnet PTP EIA 232
- BACnet PTP Modem

Moreover it supports the functionality BACnet Broadcast Management Device (BBMD) incl. Foreign Device Registration for BACnet / IP. Detailed data for supported BACnet Objects and BACnet Services are given in the data sheet BACnet Implementation Conformance Statement (PICS).

Detailed technical information: page 16 - OPEN 500 EMS

For further details: Overview on page 18-19.

Article	Type	Art.-No.
OPEN 600 EMS Native BACnet Controller for connection to Ethernet bus systems. Up to 5 OPEN IO modules with CAN interface can be connected.		
Controller with 32 integrated in- and outputs, w/o manual control.	DS-OPEN 600/0 EMS	DS-360077
Controller with 32 integrated in- and outputs, w/o manual control extendable by up to 5 OPEN IO modules.	DS-OPEN 600/5 EMS	DS-360075
Controller with 32 integrated in- and outputs, with manual control.	DS-OPEN 600H/0 EMS	DS-360079
Controller with 32 integrated in- and outputs, with manual control extendable by up to 5 OPEN IO modules.	DS-OPEN 600H/5 EMS	DS-360078



Technical Information

Interfaces:

- 1 x CAN-bus baud rate 10 kBit/s .. 1 MBit/s, preset 50 kBit/s, connection via bridge bus connectors
- 1 x serial RS232 COM 1 / COM 2 switchable, connection via RJ45
- 1 x serial RS485 galvanically isolated, removable spring terminals up to 1.5 mm²
- 2 x fast Ethernet 10/100 BaseT (RJ45), two-port switch
- All interfaces are equipped with a status LED.
- Additional: 1 x LED for operation status
- 1 x LED Error
- 1 x LED Run

Onboard IOs:

- 8 digital inputs
 - Input impedance R_{in} = approx. 5 kOhm against GND
 - Digital status inputs, debouncing approx. 30 ms
 - Counter of up to 80Hz, debouncing approx. 4 ms
 - Status LED
- 12 digital outputs
 - Digital status outputs, max. 80 mA at each output
 - Impulse-outputs (software)
 - PWM-outputs (software)
 - Status LED
- 8 analog inputs
 - Input impedance R_{in} = approx. 100 kOhm against GND
 - AD converter resolution of 24 bit
 - 0 .. 10V resolution 0,2 mV
 - 10 mV/K Measurement range -50 .. +150 °C, resolution 0,02 K
 - Pt1000 Measurement range -50 .. +650 °C, resolution < 0,1 K
 - Ni1000 DIN Measurement range -50 .. +650 °C, resolution < 0,1 K
 - Ni1000 TK5000 Measurement range -50 .. +650 °C, resolution < 0,1 K
 - Poti Measurement range 0,5 .. 10 kOhm, resolution < 1 Ohm
- 4 analog outputs
 - 0 .. 10V max. 8 mA per output, resolution ca. 100 mV
 - Status LED

For further details: Overview on page 18-19.

Note: System training seminars are necessary in order to use BACnet controllers as they are intended. Refer to section training.