

Description

The OPEN 4100 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 **4000 BACnet objects**.

The OPEN 4100 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 4100 EMS supports up to 4000 physical data points.

Variant C1

- 1 CAN-bus, up to 99 OPEN IO modules

Variant C2

- 2 CAN-bus, up to 198 OPEN IO modules.
- CAN-HSB safety ring bus activated. Further information for the CAN-HSB is given on page 24.

Technical Information

BACnet – functionalities

The OPEN 4100 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.

The 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 6 - OPEN 3100 EMS

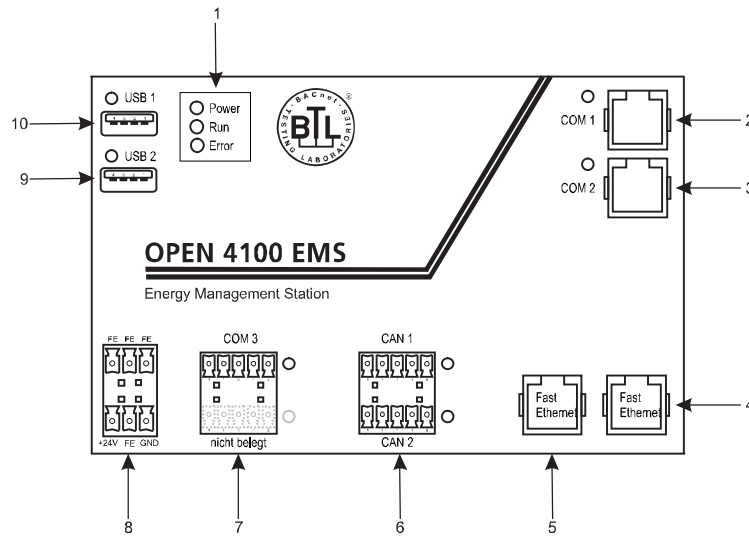
For further details: Overview on page 18-19.

Article	Type	Art.-No.	PG	€
OPEN 4100 EMS - Variant C1 Native BACnet controller for connection to Ethernet bus systems. Up to 99 OPEN IO modules with CAN interface can be connected.	DS-OPEN 4100 EMS C1	DS-360093	A1	4353,00
OPEN 4100 EMS - Variant C2 Native BACnet controller for connection to Ethernet bus systems. Up to 198 OPEN IO modules with CAN interface can be connected.	DS-OPEN 4100 EMS C2	DS-360094	A1	5557,00

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

BACnet® - Controllers

OPEN 4100 EMS



Interfaces

Ethernet interface	10/100BaseT, Twisted Pair
Protocols	TCP/IP, UDP/IP, Telnet, FTP, BACnet/IP, HTTP
Baud rate	10 Mbit/s, 100 Mbit/s, automatic recognition
Interface	2 x RJ 45, two-port switch
Application	OPENweb, OPENview, Redundancy, OPC, LAN, BACnet, Service, Modem, TUP
CAN-bus 1	CAN 2.0B, electrically isolated ISO 11898
Baud rate	10 kbit/s .. 1 Mbit/s, preset to 50 kbit/s
Interface	Connector socket with spring terminals up to 1.5 mm ²
Application	OPEN IO modules, GALAXY, CORA, CODI, LSD-C, IO7, PWH, PLD
CAN-bus 2	optional
USB 1 .. 2	Hardware: USB 2.0, implemented driver: USB 1.1
Interface	USB A
Application	service
COM 1 .. 2	RS232
Baud rate	300 .. 115200 bit/s
Interface	COM 1 / COM 2 = RJ 45
COM 3	RS485
Baud rate	2400 .. 115200 bit/s
Interface	COM 3 = RJ 45 and spring terminals up 1.5 mm ²

Overview of interfaces

1	LED for operating status
2	Serial interface COM 1, RS232
3	Serial interface COM 2, RS232
4	Fast Ethernet 2 (10/100 BaseT)
5	Fast Ethernet 1 (10/100 BaseT)
6	CAN-bus, CAN1 and CAN2 (optional)
7	Serial interface COM 3, RS485
8	Power supply 24 V DC
9	Universal Serial Bus USB 2
10	Universal Serial Bus USB 1