



EL6861 | 1-channel BACnet MS/TP interface RS485, D-sub connection

The EL6861 serial interface enables the connection of BACnet MS/TP devices (Master-Slave/Token-Passing) via an RS485 interface. Up to 32 MS/TP devices (up to 64 if ultra-low power transceivers are used) can be connected. Use the EL6861 interface only in combination with TwinCAT and CX9020 or higher, since the BACnet MS/TP driver integrated in TwinCAT implements the communication via the MS/TP protocol (BACnet Revision 12). The configuration is also done in TwinCAT.

The RS485 interface guarantees high immunity to interference through electrically isolated signal transmission. The EL6861 provides 1 x 5 V DC at 20 mA (electrically isolated, short-circuit proof) from the E-bus supply for use with the bias resistors (network bias).

The following devices can be typically connected to the EL6861:

- frequency converters
- pumps
- drives (especially valve drives)
- room control units
- compact controllers (for example volume flow controllers)

Technical data	EL6861
Technology	D-sub, 9-pin
Devices	32, up to 64 if ultra-low power transceivers are used
Data transfer channels	1
Data transfer rates	9600, 19,200, 38,400, 57,600, 76,800 and 115,200 baud (default: 9600 baud)
Interfaces	1 x RS485
Termination resistor	externally via ZB3100 or ZS1031-3000 connector
Bias resistor (network bias)	externally via ZB3100 or ZS1031-3000 connector
Cable length	max. 500 m twisted pair
Providing external supply	1 x max. 5 V/20 mA, out of E-bus supply, short-circuit proof
Power supply	via the E-bus
Distributed clocks	–
Electrical isolation	500 V (E-bus/signal voltage)
Bit width in the process image	128 x 8 bit input, 128 x 8 bit output, 16 bit control, 16 bit status
Configuration	configuration via controller, TwinCAT
Current consumption power contacts	–
Current consumption E-bus	typ. 170 mA
Special features	can only be used with TwinCAT
Weight	approx. 55 g
Operating/storage temperature	-25...+60 °C/-40...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable

