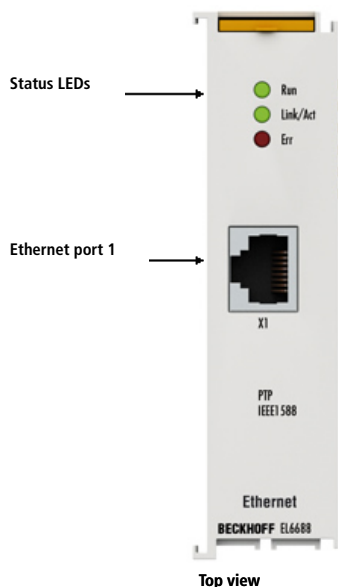




EL6688 | IEEE 1588 external synchronisation interface

The EL6688 EtherCAT Terminal presents itself as a device in the IEEE 1588 synchronisation system with support for PTPv1 (IEEE 1588-2002) and PTPv2 (IEEE 1588-2008) based on Ethernet.

On the one hand, the EL6688 is an IEEE 1588 clock (master or slave) that is synchronised based on the protocol precision. On the other hand, it is synchronised as an EtherCAT Terminal by the distributed clock system. The following operating modes can be selected via the TwinCAT System Manager: "SlaveOnly", "MasterOnly" and "Best Master Clock". In this way, a consistent timebase can be created across applications for any number of spatially separated EtherCAT systems and machine sections, e.g. for application with axes or measurement technology. The compact EtherCAT Terminal enables flexible deployment depending on the application requirements.

Technical data	EL6688
Number of Ethernet ports	1
Bus system	Ethernet (IEEE 802.3)
Ethernet interface	10BASE-T/100BASE-TX Ethernet with 1 x RJ45
Data transfer rates	10/100 Mbit/s, IEEE 802.3u auto-negotiation, half or full duplex at 10 and 100 Mbit/s possible, automatic settings
Cable length	up to 100 m twisted pair
Hardware diagnosis	status LEDs
Power supply	via the E-bus
Distributed clocks	yes
Electrical isolation	500 V (E-bus/Ethernet)
Protocol	PTPv1 (IEEE 1588-2002), PTPv2 (IEEE 1588-2008)
Configuration	no
Current consumption power contacts	–
Current consumption E-bus	typ. 310 mA
Special features	usable in TwinCAT as a reference clock
Weight	approx. 75 g
Operating/storage temperature	0...+55 °C/-25...+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
Approvals	CE, UL, Ex

System	
subsystem	For further subsystem products please see the system overview .