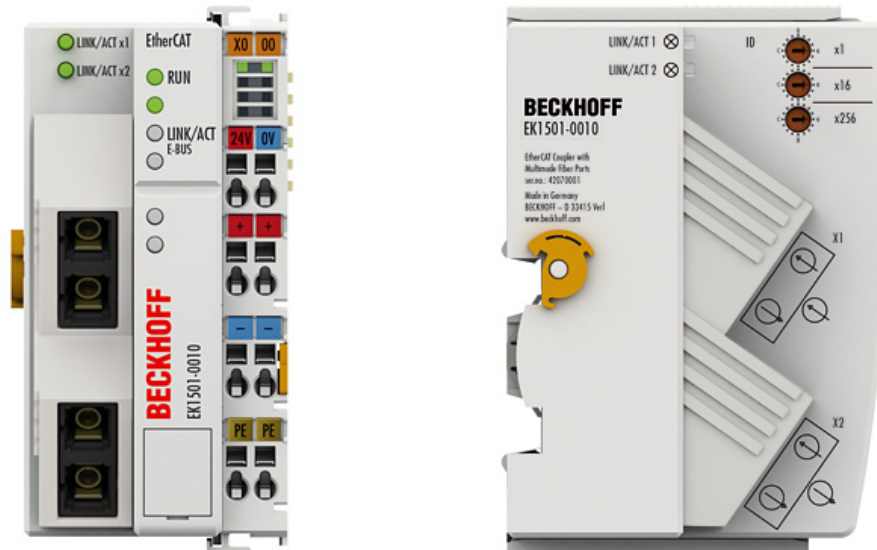




EK1501-0010 | EtherCAT Coupler with ID switch, fibre optic

The EK1501-0010 coupler connects EtherCAT with the EtherCAT Terminals (ELxxxx). A station consists of an EK1501-0010 coupler, any number of EtherCAT Terminals, an EL9011 bus end cap or an EK1110 EtherCAT extension. The coupler converts the passing telegrams from Ethernet 100BASE-FX to E-bus signal representation. The singlemode glass fibre connection enables distances of up to 20 km between two couplers.

The EK1501-0010 has three hexadecimal ID switches for assigning an ID to a group of EtherCAT components. This group can then be located at any position within the EtherCAT network. Variable topologies are therefore easily implementable.

Technical data	EK1501-0010
Task within EtherCAT system	coupling of EtherCAT Terminals (ELxxxx) to 100BASE-FX EtherCAT networks, with identity verification
Data transfer medium	singlemode glass fibre 9/125 µm (SM)
Distance between stations	max. 20,000 m (100BASE-FX)
Number of EtherCAT Terminals	up to 65,534
Type/number of peripheral signals	max. 4.2 GB addressable I/O points
Number of configurable IDs	4096
Protocol	EtherCAT
Delay	approx. 1 µs
Data transfer rates	100 Mbaud
Configuration	not required
Bus interface	2 x SC Duplex
Power supply	24 V DC (-15 %/+20 %)
Input current	150 mA + (total E-bus current)/4
Current consumption E-bus	–
Current consumption 24 V DC	typ. 70 mA
Current supply E-bus	2000 mA
Power contacts	24 V DC max./10 A max.
Weight	approx. 190 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
Approvals	CE, UL, Ex

Accessories	
Cordsets	cordsets and connectors

Further fibre optic products	
EK1501	EtherCAT Coupler with ID switch, multimode fibre optic for E-bus terminals (ELxxxx)
EK1501-0100	EtherCAT Coupler, media converter (multimode fibre optic to RJ45) with ID switch
EK1521	1-port EtherCAT multi-mode fibre optic junction
EK1521-0010	1-port EtherCAT singlemode fibre optic junction, distance between stations up to 20 km
CU1521	EtherCAT media converter fibre optic, IP20
EP9521	EtherCAT/Industrial Ethernet module EP9521 for Industrial Fast Ethernet/100 Mbaud

System	
EtherCAT	For further EtherCAT products please see the system overview