



EP9521 | EtherCAT media converter, optical fibre/copper (multimode), IP 67

The EtherCAT/Industrial Ethernet module EP9521 for Industrial Fast Ethernet/100 Mbit/s serves as media converter from optical fibre to copper and vice versa. The media converter is suitable for multimode fibre-optic cables and is used for direct transfer between the two media. The media converter operates bidirectionally and collision-free with constant delay. It can be diagnosed as a separate EtherCAT device. In this way, unlike standard media converters, it enables fast link control and the safe closing of the EtherCAT strand even in the event of a fault. Since the transfer direction (copper to optical fibre | optical fibre to copper) is relevant for the bus, the device can be configured via a switch. Via this switch "Link Loss Forwarding" for normal Ethernet operation can also be selected.

The EP9521 is useful in applications where EtherCAT transfers over large distances are required or where higher EMC loads on the bus line are to be expected.

Technical data	EP9521-0020
Task within EtherCAT system	media transition from M8 copper physics to multimode fibre optic and back
Number of channels	1
Data transfer medium	multimode glass fibre 50/125 µm; Ethernet/EtherCAT cable (min. Cat. 5), shielded
Bus interface	1 x LC Duplex; 2 x M8, shielded, screw type
Distance between stations	max. 2000 m (100BASE-FX); max. 100 m (100BASE-TX)
Protocol	EtherCAT/Industrial Fast Ethernet
Delay	approx. 1 µs
Data transfer rates	100 Mbit/s
Configuration	per rotary switch
Power supply	24 V DC (-15 %/+20 %)
Dimensions (W x H x D)	85 mm x 126 mm x 26.5 mm
Operating/storage temperature	-25...+60 °C/-40...+85 °C
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 65/66/67 (conforms to EN 60529)/variable
Approvals/markings	CE, UL

Accessories	
ZK1090-3xxx-xxxx	Cables for EtherCAT signal in- and -output
ZK2020-3xxx-xxxx	Cables for M8 power supply

Further fibre optic products	
EK1501	EtherCAT Coupler with ID switch, multimode fibre optic for E-bus terminals (ELxxxx)
EK1501-0010	EtherCAT Coupler with ID switch, singlemode fibre optic for E-bus terminals (ELxxxx), distance between stations up to 20 km
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