



i EK1101-0010 | EtherCAT Coupler with ID switch, Extended Distance

The EK1101-0010 coupler connects EtherCAT with the EtherCAT Terminals (ELxxxx). A station consists of an EK1101-0010 coupler, any number of EtherCAT Terminals and a bus end cap. The coupler converts the passing telegrams from Ethernet 100BASE-TX to E-bus signal representation.

Using the extended distance connection, distances of up to 300 m can be bridged between two Extended Distance Couplers. If only one connection of the two Couplers is configured for Extended Distance, the maximum distance between the stations is 100 m.

The EK1101-0010 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	EK1101-0010
Task within EtherCAT system	coupling of EtherCAT Terminals (ELxxxx) to 100BASE-TX EtherCAT networks, with identity verification
Data transfer medium	Ethernet/EtherCAT cable (min. Cat. 5), shielded
Distance between stations	max. 300 m (copper, Cat. 5, 4-wire)
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 μ s
Data transfer rates	100 Mbit/s
Configuration	not required
Bus interface	2 x RJ45
Power supply	24 V DC (-15 %/+20 %)
Current consumption from Us	90 mA + (Σ E-bus current/4)
Current consumption from Up	load
Current supply E-bus	2000 mA
Power contacts	max. 24 V DC/max. 10 A
Electrical isolation	500 V (power contact/supply voltage/Ethernet)
Weight	approx. 105 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/markings	CE

Accessories	
Cordsets	cordsets and connectors

System

EtherCAT

For further EtherCAT products please see the [system overview](#)



Product announcement

estimated market release 3rd quarter 2019