

EK1101-0008 | **EtherCAT Coupler with ID switch and M8** connection

The EK1101-0008 coupler connects EtherCAT with the EtherCAT Terminals (ELxxxx). Compared with the EK1101, the EK1101-0008 has two M8 sockets, which are compatible with the EtherCAT Box modules. The coupler is connected to the network via the upper Ethernet interface. The lower M8 socket may be used to connect further EtherCAT devices in the same strand. In the EtherCAT network, the EK1100-0008 coupler can be installed anywhere in the Ethernet signal transfer section (100BASE-TX) — except directly at the switch. If Ethernet cables with adequate performance are used, e.g. ZK1090-3131-1xxx, line lengths of 100 m are possible via M8.

The EK1101-0008 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 | EK1101-0008 |
|-----------------------------------|---|
| 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. 100 m (100BASE-TX) |
| 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 Mbit/s |
| Bus interface | 2 x M8, shielded, screw type |
| Power supply | 24 V DC (-15 %/+20 %) |
| Current consumption from Us | 70 mA + (Σ E-bus current/4) |
| Current consumption from UP | load |
| Current supply E-bus | 2000 mA |
| Current consumption E-bus | - |
| Power contacts | max. 24 V DC/max. 10 A |
| Electrical isolation | 500 V (power contact/supply voltage/Ethernet) |
| Weight | approx. 110 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/markings | CE |

| Accessories | |
|-------------|-------------------------|
| Cordsets | cordsets and connectors |

System

EtherCAT

For further EtherCAT products please see the system overview