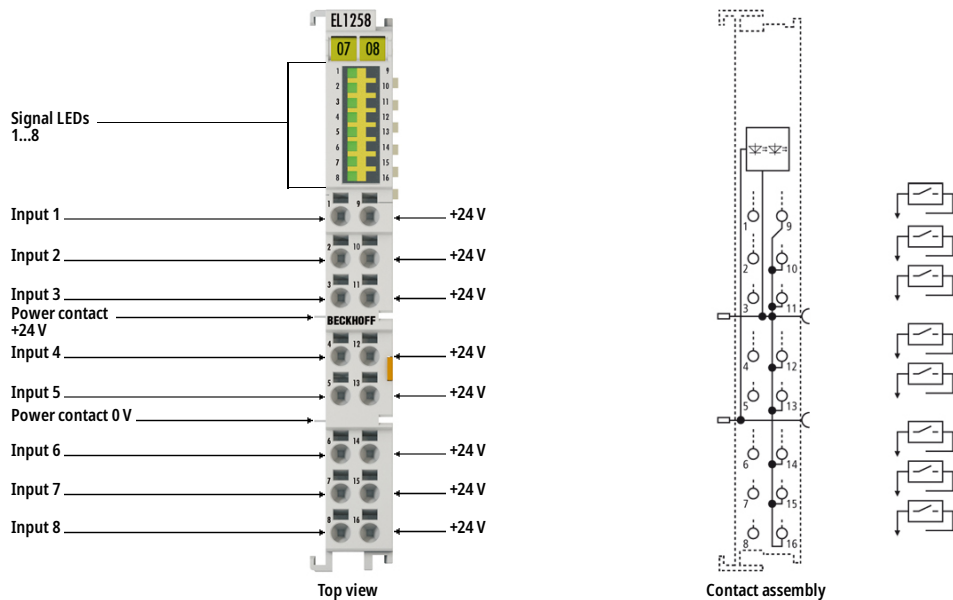


EL1258 | EtherCAT Terminal, 8-channel digital input, 24 V DC, 1 μ s, multi-timestamp



i **Product status:** Regular delivery

The EL1258 digital input terminal acquires the fast binary 24 V control signals from the process level and transmits them, in an electrically isolated form, to the controller. Each EtherCAT Terminal has eight channels that indicate their signal state via light emitting diodes. In comparison with the EL1252, the EL1258 offers not only a higher channel density, but also a higher performance thanks to the XFC multi-timestamp function. Whereas the EL1252 can accept one edge change with time stamp per bus cycle, the EL1258 offers the possibility to register up to 32 events with time stamps. The reduced timestamp width of 32 bits, which is equivalent to a resolution of 4.29 seconds, does not represent a functional limitation for most applications. The EL1258 is synchronized with other EtherCAT devices through the distributed clocks system, so that events in the whole system can be measured with a uniform timebase.

Special features:

- suitable for particularly fast signals due to very low input delay
- synchronized operation through distributed clocks XFC technology possible
- high performance thanks to XFC multi-timestamp feature

Product information

Technical Data

| Technical data | EL1258 |
|-----------------------|-----------------------|
| Connection technology | 2-wire |
| Number of inputs | 8 |
| Nominal voltage | 24 V DC (-15 %/+20 %) |

| | |
|------------------------------------|---|
| "0" signal voltage | -3...+5 V (IEC 61131-2, type 1/3) |
| "1" signal voltage | 11...30 V (IEC 61131-2, type 1/3) |
| Input current | typ. 3 mA (EN 61131-2, type 1/3) |
| Input filter | typ. < 1 μ s |
| Internal sampling/execution | < 10...40 μ s, corresponds to 100...25 k detectable edges/s, dependent on configuration |
| Distributed clock precision | << 1 μ s |
| Distributed clocks | yes |
| Current consumption power contacts | typ. 6 mA |
| Current consumption E-bus | typ. 130 mA |
| Electrical isolation | 500 V (E-bus/field potential) |
| Configuration | no address or configuration setting |
| Special features | multi-timestamping |
| Weight | approx. 55 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. rating/installation pos. | IP20/variable |
| Approvals/markings | CE, UL |

| | |
|-----------------------------------|---|
| Housing data | EL-12-16pin |
| Design form | HD (High Density) housing with signal LEDs |
| Material | polycarbonate |
| Dimensions (W x H x D) | 12 mm x 100 mm x 68 mm |
| Installation | on 35 mm DIN rail, conforming to EN 60715 with lock |
| Side by side mounting by means of | double slot and key connection |
| Marking | labeling of the BZxxx series |
| Wiring | solid conductors (e): direct plug-in technique; fine-stranded conductors (f) and ferrule (a): spring actuation by screwdriver |
| Connection cross-section | s*: 0.08...1.5 mm ² , st*: 0.25...1.5 mm ² , f*: 0.14...0.75 mm ² |
| Connection cross-section AWG | s*: AWG 28...16, st*: AWG 22...16, f*: AWG 26...19 |
| Stripping length | 8...9 mm |
| Current load power contacts | I _{max} : 10 A |

*s: solid wire; st: stranded wire; f: with ferrule