



EL1258 | 8-channel digital input terminal with multi-timestamping

The 8-channel digital input terminal EL1258 acquires fast binary control signals from the process level and transmits them electrically isolated to the controller. In comparison with the EL1252, the EL1258 not only offers a higher channel density, but thanks to the multi-timestamping function also a higher performance. Whereas the EL1252 can accept one edge change with timestamp per bus cycle, the EL1258 offers the possibility to register up to 32 events with timestamps. The reduced timestamp width of 32 bits, which corresponds to a resolution of 4.29 seconds, does not result in functional restrictions for most applications. Through the distributed clocks system, the EL1258 is synchronised with other EtherCAT devices, so that events in the whole system will be measured with a uniform time base.

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. class/installation pos.	IP 20/variable
Approvals	CE, UL

Further information	
XFC	eXtreme Fast Control Technology