



EL6224-0090 | TwinSAFE SC: IO-Link terminal

The EL6224-0090 IO-Link terminal enables connection of up to four IO-Link devices, e.g. actuators, sensors or combinations of both. The parameterisation of the IO-Link devices with service data can be done from TwinCAT via ADS or very conveniently via the integrated IO-Link configuration tool. IO-Link devices can be operated in 3-wire connection mode.

With the aid of the TwinSAFE SC technology (TwinSAFE Single Channel) it is possible to make use of standard signals for safety tasks in any network or fieldbus. The standard functions and features of the I/Os remain available. The data from these TwinSAFE SC I/Os is fed to the TwinSAFE Logic, where they undergo safety-related multi-channel processing. In the Safety Logic the data originating from different sources is analysed, checked for plausibility and submitted to a "voting". This is done by certified function blocks such as Scale, Compare/Voting (1oo2, 2oo3, 3oo5), Limit, etc. For safety reasons, however, at least one of the data sources must be a TwinSAFE SC component. The remainder of the data can originate from other standard I/Os, drive controllers or measuring transducers.

With the aid of the TwinSAFE SC technology it is typically possible to achieve a safety level equivalent to PL d/Cat. 3 in accordance with EN ISO 13849-1 or SIL 2 in accordance with EN 62061.

Technical data	EL6224-0090
Technology	IO-Link input/output
Specification version	IO-Link V1.1
IO-Link interfaces	4
Field voltage	24 V DC via power contacts
Connection	3-wire
Data transfer rates	4.8 kbaud, 38.4 kbaud and 230.4 kbaud
Cable length	max. 20 m
Power supply	via E-bus and power contacts
Electrical isolation	500 V (E-bus/signal voltage)
Power contacts	yes
Supply current for devices	500 mA per device
Current consumption E-bus	typ. 120 mA
Special features	TwinSAFE SC, each channel parameterisable in TwinCAT
Weight	approx. 60 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, Ex

Option for the second channel	
EL3124	4-channel analog input 4...20 mA, differential input, 16 bit
EL3174	4-channel analog input, parameterisable, -10/0...+10 V, -20/0/+4...+20 mA, 16 bit
EL3214	4-channel input terminal PT100 (RTD) for resistance sensors, 16 bit, 3-wire system
EL3314	4-channel thermocouple input, 16 bit

Related products	
TwinSAFE SC	TwinSAFE SC technology
EK1960	TwinSAFE Compact Controller
EL6910	TwinSAFE Logic (TwinCAT 3)

System	
IO-Link	For further IO-Link products please see the system overview .