



ER1809-002x | 16-channel digital input 24 V DC, 3.0 ms

The ER1809 EtherCAT Box with digital inputs acquires the binary control signals from the process level and transmits them, in an electrically isolated form, to the controller. The state of the signals is indicated by light emitting diodes. The signals are optionally connected via M8 (ER1809-0021) or M12 (ER1809-0022) screw type connectors.

The sensors are supplied from the box supply voltage U_s . The auxiliary voltage U_p is not used in the input module, but may be connected in order to be relayed downstream.

The EtherCAT Box modules with zinc die-cast housing are ready for use in harsh industrial and process environments. With the fully sealed design and metal surfaces the ER series is ideal for applications requiring enhanced load capacity and protection against weld spatter, for example.

Technical data	ER1809-0021	ER1809-0022
Specification	EN 61131-2, type 1/3	
Number of inputs	16	
Input connections	M8, screw type	M12, screw type
Protocol	EtherCAT	
Bus interface	2 x M8 socket, shielded, screw type	
Nominal input voltage	24 V DC (-15 %/+20 %)	
Input filter	3.0 ms	
"0" signal voltage	-3...+5 V (EN 61131-2, type 3)	
"1" signal voltage	11...30 V (EN 61131-2, type 3)	
Input current	typ. 3 mA (EN 61131-2, type 3)	
Distributed clocks	-	
Sensor supply	from control voltage, max. 0.5 A total, short-circuit-proof	
Power supply connection	feed: 1 x M8 male socket, 4-pin; downstream connection: 1 x M8 female socket, 4-pin	
Bit width in the process image	16 inputs	
Current consumption from U_s (without sensor current)	130 mA	
Electrical isolation	500 V	
Operating/storage temperature	-25...+60 °C/-40...+85 °C	
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 65/66/67 (conforms to EN 60529)/variable	
Approvals	CE, UL in preparation	

Accessories	
ZK1090-3xxx-xxxx	Cables for EtherCAT signal in- and -output
ZK2020-3xxx-xxxx	Cables for M8 power supply

Related products	
EP1809	EtherCAT Box, industrial housing, 16-channel digital input 24 V DC
EP1819	EtherCAT Box, industrial housing, 16-channel digital input 24 V DC