



EQ1809-0022 | 16-channel digital input 24 V DC

The EQ1809 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 connected via M12 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 modules of the EQxxxx series are made of stainless steel and feature the "Hygienic Design" completely. Therefore they are ideal for applications in the food, chemical or pharmaceutical industries, which require protection class IP 69K.

Technical data	EQ1809-0022
Specification	EN 61131-2, type 1/3
Number of inputs	16
Input connections	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
"1" signal voltage	11...30 V, 6 mA input current (EN 61131-2, type 3)
Input current	typ. 3 mA (EN 61131-2, type 3)
Distributed clocks	–
Sensor supply	from load supply 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
Special features	V2A stainless steel, Hygienic Design
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 69K (according to EN 60529)/variable
Approvals	CE, UL

Accessories	
ZK1090-3xxx-xxxx	Cables for EtherCAT signal in- and -output
ZK2000-6xxx-xxxx	Cables for M12 I/O connection sockets
ZK2020-3xxx-xxxx	Cables for M8 power supply

Stainless steel products

For further information on the stainless steel control solution please see [here](#).