

EK9160 | IoT Bus Coupler



Product status: Regular delivery

The EK9160 Coupler provides direct connectivity for EtherCAT I/Os to the Internet of Things (IoT) without the need for a control program. It converts the E-bus signal representation to different IoT communication protocols and enables in this way the simple and standardized integration of I/O data into cloud-based communication and data services. Neither a controller nor prior programming is necessary. The I/O data transmission can be parameterized in a user-friendly configuration dialog of the integrated web server providing access via any browser. The required cloud services and security functions (authentication, encryption, etc.) can also be conveniently configured using a browser. Following parameterization, the coupler autonomously transmits the digital or analog I/O values to the cloud service, including timestamp.

Product information

Technical data

Technical data	ЕК9160
Task within EtherCAT system	coupling of standard digital and analog EtherCAT Terminals to the IoT world
Protocol	MQTT, OPC UA
Flash memory	slot for microSD card, 512 MB included (expandable)
Data transfer rates	100 Mbit/s
Configuration	via integrated web server
Bus interface	2 x RJ45 (switched)
Power supply	24 V DC (-15 %/+20 %)

Input current	150 mA + (total E-bus current)/4
Current supply E-bus	2000 mA
Power contacts	max. 24 V DC/max. 10 A
Electrical isolation	500 V (power contact/supply voltage/Ethernet)
Dimensions (W x H x D)	71 mm x 100 mm x 73 mm
Operating/storage temperature	-25+60 °C/-40+85 °C
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
Protect. rating/installation pos.	IP20/see documentation
Approvals/markings	CE, UL

Housing data	EK-71-8pin
Design form	compact terminal housing with signal LEDs
Material	polycarbonate
Dimensions (W x H x D)	71 mm x 100 mm x 73 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 conductor (e), flexible conductor (f) and ferrule (a): spring actuation by screwdriver
Connection cross-section	s*: 0.082.5 mm², st*: 0.082.5 mm², f*: 0.141.5 mm²
Connection cross-section AWG	s*: AWG 2814, st*: AWG 2814, f*: AWG 2616
Stripping length	89 mm
Current load power contacts	I _{max} : 10 A

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