

# IL2302-B110 | Coupler Box, 4-channel digital input + 4-channel digital output, EtherCAT, 24 V DC, 3 ms, 0.5 A, M12

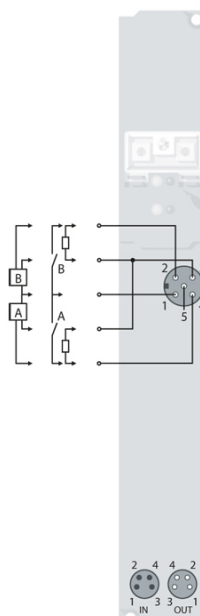


Image similar, may contain optional accessories

**Product status:** regular delivery

The IL2300-Bxxx Coupler Box module combines four digital inputs and four digital outputs in one device. The outputs handle load currents of up to 0.5 A, are short-circuit proof and protected against inverse polarity. The state of each signal is indicated by means of light emitting diodes. The signals are connected via M12 screw type connectors.

## Product information

### Technical data

Technical data digital inputs/outputs	IL2302-Bxxx
Specification	EN 61131-2, type 2
Number of channels	4 inputs + 4 outputs
Input/output connections	M12, screw type
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 2)
Sensor supply	from control voltage, max. 0.5 A, short-circuit proof in total
Load type	ohmic, inductive, lamp load

Rated load voltage	24 V DC (-15%/+20%)
Max. output current	0.5 A per channel, individually short-circuit proof
Short-circuit current	typ. 1.5 A
Auxiliary power current	typ. 20 mA
Current consumption from Us	see documentation
Power supply connection	feed: 1 x M8 male socket, 4-pin, a-coded; downstream connection: 1 x M8 female socket, 4-pin, a-coded
Bit width in the process image	4 inputs + 4 outputs
Electrical isolation	channels/control voltage: no, between the channels: no, control voltage/fieldbus: depends on the bus system
Special features	IP-Link coupler
Operating temperature	0...55°C
Storage temperature	-25...+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. rating/installation pos.	IP65/66/67 (conforms to EN 60529)/variable
Approvals/markings	CE, UL

Technical data	IL2302-B110
Extension modules	max. 78 with max. 512 byte input and 512 byte output data
Digital peripheral signals	max. 624 inputs and 624 outputs
Analog peripheral signals	max. 127 inputs and 127 outputs
Protocol	EtherCAT
Configuration	via KS2000
Data transfer rates	100 Mbit/s
Bus interface	2 x M12 socket, 4-pin, D-coded
Data transfer medium	Ethernet/EtherCAT Cat.5 cable
Power supply	control voltage: 24 V DC (-15%/+20%); load voltage: according to I/O type
Power supply connection	feed: 1 x M8 male socket, 4-pin, a-coded; downstream connection: 1 x M8 female socket, 4-pin, a-coded
Box supply current	30 mA + current consumption of sensors, max. 0.5 A
Auxiliary power current	according to I/O type
Electrical isolation	control voltage/fieldbus: yes, control voltage/inputs or outputs: according to I/O type
Topology	line topology
Distance between stations	100 m (master/box, box/box)
Weight	approx. 250 g
Operating temperature	0...55°C

Storage temperature	-25...+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. rating/installation pos.	IP65/66/67 (conforms to EN 60529)/variable
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<b>Housing data</b>	<b>XXL housing</b>
Dimensions (W x H x D)	30 mm x 210 mm x 26.5 mm
Material	PA6 (polyamide)
Installation	2 fixing holes 3.5 mm diameter for M3

## Accessories

Accessories	
<a href="#">ZK1020-0101-0xxx</a>	pre-assembled IP-Link cable, drag-chain suitable
<a href="#">ZK2000-6100-0xxx</a>	M12, plug, straight, male, 4-pin, A-coded – open end
<a href="#">ZK2000-6162-0xxx</a>	M12, plug, straight, male, 4-pin, A-coded – M12, socket, straight, female, 4-pin, A-coded
<a href="#">ZK2020-3200-0xxx</a>	M8, socket, straight, female, 4-pin – open end
<a href="#">ZK2020-3132-0xxx</a>	M8, plug, straight, male, 4-pin – M8, socket, straight, female, 4-pin
<a href="#">ZS1020-0010</a>	IP-Link plug, 1 piece, plug for IP-Link system
<a href="#">ZS2000-2610</a>	Plug field assembly, Sensor, IP65/67, M12, straight, male, 4-pin, A-coded, 0.14...1.5 mm <sup>2</sup> , Ø 4...8 mm
<a href="#">ZS2000-2710</a>	Plug field assembly, Sensor, IP65/67, M12, straight, male, 5-pin, A-coded, 0.25...1.5 mm <sup>2</sup> , Ø 4...8 mm
<a href="#">ZS2000-2310</a>	Plug field assembly, Sensor and Power, IP65/67, M8, straight, male, 4-pin, A-coded, 0.14...0.5 mm <sup>2</sup> , Ø 4...5.5 mm
<a href="#">ZS2000-2320</a>	Socket field assembly, Sensor and Power, IP65/67, M8, straight, female, 4-pin, A-coded, 0.14...0.5 mm <sup>2</sup> , Ø 4...5.5 mm
<a href="#">ZS5300-0011</a>	Mounting plate for 14 small or 7 wide EtherCAT-/ EtherCAT P box modules, stainless steel, 500 mm x 130 mm x 1.5 mm
<a href="#">ZS5000-0014</a>	blinking plug, plastic (IP65/67), for M8 socket, green, packaging unit = 50 pieces
<a href="#">ZS5000-0020</a>	blinking plug, plastic (IP67), for M12 socket, packaging unit = 50 pieces
<a href="#">ZB8801-0000</a>	torque wrench for hexagonal plugs, adjustable
<a href="#">ZB8801-0001</a>	torque cable key, M8/wrench size 9, for ZB8801-0000
<a href="#">ZB8801-0002</a>	torque cable key, M12/wrench size 13, for ZB8801-0000
<a href="#">ZK1020-0101-1000</a>	IP-Link connector, for flush mounted extension modules