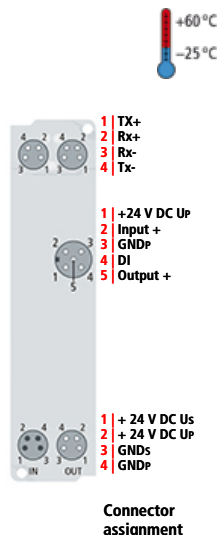


EP4314-1002



Connector assignment

## i EP4314-1002 | 2-channel analog input + 2-channel analog output $\pm 10/\pm 20$ mA, parameterisable, 16 bit

The EP4314-1002 EtherCAT Box combines two analog inputs, two analog outputs and two digital inputs which can be individually parameterised, so that they process/generate signals either in the  $\pm 10$  or  $\pm 20$  mA range. The resolution for the current and voltage signals is 16 bit (signed).

The voltage or output current is supplied to the process level with a resolution of 15 bit (default), and is electrically isolated. Ground potential for the two output channels is common with the 24 V DC supply. On an M12 there is one digital and one analog input as well as one analog output.

Technical data	EP4314-1002
Number of channels	2 analog outputs + 2 analog inputs + 2 digital inputs
Number of outputs	2
Number of inputs	2 + 2
Input/output connections	M12, screw type
Protocol	EtherCAT
Bus interface	2 x M8 socket, shielded, screw type
Signal type	$\pm 10/\pm 20$ mA
Nominal voltage	24 V DC (-15 %/+20 %)
Load	output: $> 5 \text{ k}\Omega$   $< 500 \Omega$
Internal resistance	input: $> 200 \text{ k}\Omega$   typ. $85 \Omega$ + diode voltage
Resolution	16 bit
Conversion time	input: $\sim 100 \mu\text{s}$ , output: $\sim 40 \mu\text{s}$
Measuring error	input: $< 0.3 \%$ , output: $< 0.1 \%$ (each relative to full scale value)
Actuator supply	from the auxiliary voltage Up
Power supply connection	feed: 1 x M8 male socket, 4-pin; downstream connection: 1 x M8 female socket, 4-pin
Electrical isolation	500 V
Current consumption from Us	120 mA
Special features	combi module, current parameterisable per channel
Operating/storage temperature	$-25 \dots +60 \text{ }^\circ\text{C}$ / $-40 \dots +85 \text{ }^\circ\text{C}$
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/markings	CE, UL in preparation

Accessories	
ZK1090-3xxx-xxxx	Cables for EtherCAT signal in- and -output
ZK2000-5xxx/71xx-xxxx	Sensor cable 5-wire unshielded/shielded
ZK2020-3xxx-xxxx	Cables for M8 power supply



### Product announcement

estimated market release 3rd quarter 2019