



EP4174-0002 | 4-channel analog output ± 10 V or 0/4...20 mA, parameterisable, 16 bit

The EP4174 EtherCAT Box has four analog outputs which can be individually parameterised, so that they generate signals either in the $-10 \dots +10$ V or the 0/4...20 mA range. The voltage or output current is supplied to the process level with a resolution of 15 bit (default), and is electrically isolated. The output scaling can be changed if required.

Ground potential for the four output channels is common with the 24 V DC supply. The analog actuators are supplied from the load voltage (freely selectable up to 30 V DC). The applied load voltage is available for actuator supply of further EtherCAT Box modules.

Technical data	EP4174-0002
Number of channels	4 analog outputs
Number of outputs	4
Output connections	M12, screw type
Protocol	EtherCAT
Bus interface	2 x M8 socket, shielded, screw type
Signal type	$-10/0 \dots +10$ V 0/4...20 mA
Nominal voltage	24 V DC (-15 %/+20 %)
Load	$> 5 \text{ k}\Omega$ $< 500 \Omega$
Resolution	16 bit
Conversion time	$\sim 40 \mu\text{s}$
Measuring error	$< 0.1 \%$ (relative to full scale value)
Actuator supply	from the auxiliary voltage U_p
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	4 x 16 bit AO output
Electrical isolation	500 V
Current consumption from U_s	120 mA
Special features	current or voltage parameterisable per channel
Weight	approx. 165 g
Operating/storage temperature	$-25 \dots +60$ °C/ $-40 \dots +85$ °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/Markings	CE, UL, ATEX
Ex-Marking	II 3 G Ex nA IIC T4 Gc

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