



## ER4374-0002 | 2-channel analog input + 2-channel analog output $\pm 10$ V or 0/4...20 mA, parameterisable, 16 bit

The ER4374 EtherCAT Box combines two analog inputs and two analog outputs which can be individually parameterised, so that they process/generate signals either in the  $-10 \dots +10$  V or the 0/4...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.

The EtherCAT Box modules with zinc die-cast housing are ready for use in harsh industrial and process environments. With the fully sealed design and metal surfaces the ER series is ideal for applications requiring enhanced load capacity and protection against weld spatter, for example.

Technical data	ER4374-0002
Number of channels	2 analog outputs + 2 analog inputs
Number of outputs	2
Number of inputs	2
Input/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	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 $U_p$
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	combi module, current or voltage parameterisable per channel
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	CE, UL in preparation

Related products	
<b>EP4374</b>	EtherCAT Box, industrial housing, 2-channel analog input + 2-channel analog output $\pm 10$ V or 0/4...20 mA, parameterisable, 16 bit