



ER8309-1022 | Multi-functional I/O box

The ER8309-1022 EtherCAT Box has various digital and analog inputs and outputs: eight digital inputs/outputs, two digital tacho inputs, two analog inputs, one analog output and a 1.2 A PWMi output. The current signals have 12-bit resolution. The tacho outputs supply a speed-dependent velocity or frequency value via digital 24 V sensors. Proportional valves, for example, can be actuated directly using the PWMi output, while intelligent valves are switched by the analog output. With its combination of inputs and outputs, the ER8309-1022 offers a compact solution for the most diverse units that can be controlled over EtherCAT.

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	ER8309-1022
Number of channels	8 digital inputs or outputs, freely configurable (6...13)
Input filter	3 ms
Limit frequency	2.5 kHz
Signal connection	M12, screw type
Number of analog inputs	2, single-ended, 12 bit, 0/4...20 mA (0/2)
Number of analog outputs	1, single-ended, 12 bit, 0/4...20 mA (15)
Number of PWMi outputs	1 x 1.2 A, max. 30 kHz (14)
Nominal voltage	24 V DC (-15 %/+20 %)
Measuring error	input: < 0.3 %, output: < 0.1 % (each relative to full scale value)
Sensor supply	from control voltage Us
Actuator supply	from the auxiliary voltage Up
Electrical isolation	500 V
Special features	multi-functional I/O box for universal use
Operating/storage temperature	-25...+60 °C/-40...+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	
EP8309	EtherCAT Box (industrial housing), multi-functional I/O box, analog/digital/tacho/PWMi