



## EL2212 | 2-channel digital output terminal 24...72 V DC with overexcitation, multi-timestamping

The EL2212 digital output terminal connects the binary control signals from the automation unit on to the actuators at the process level with electrical isolation. With multi-timestamping as many events can be read per channel in each EtherCAT cycle, as were pre-loaded in the internal buffer.

The EL2212 supports particularly fast switching of inductive loads, such as valves or relays. 24...72 V supplies are connected to the power contacts and passed through to the load when switched on. After an adjustable waiting period the terminal begins to control the current channel-wise in order to protect the load. The switch-off process is also accelerated considerably by the pole reversal of the voltage. Both channels can be activated independently of each other.

Technical data	EL2212   ES2212
Connection technology	4-wire
Number of outputs	2
Rated load voltage	24...72 V DC (-15 %/+0 %)
Load type	inductive > 1 mH
Resolution timestamp	1 ns
Precision of timestamp in the terminal	10 ns
Distributed clocks	yes
Distributed clock precision	<< 1 $\mu$ s
Max. output current	peak current: max. 10 A per channel, holding current: 0.2...2.5 A per channel
Short circuit current	12 A typ.
Reverse voltage protection	-
Switching times	without distributed clocks: $T_{ON}/T_{OFF}$ typ. 20 $\mu$ s, with distributed clocks: $T_{ON}/T_{OFF}$ typ. < 1 $\mu$ s via internal compensation
Output stage	full bridge (push-pull)
Current consumption E-bus	typ. 120 mA
Electrical isolation	500 V (E-bus/field potential)
Current consumption power contacts	load-dependent
Configuration	via TwinCAT System Manager
Special features	Multi-timestamping, current-controlled outputs can be connected in high-resistance mode.
Weight	approx. 50 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
Relative humidity	95 %, no condensation
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 20/variable
Pluggable wiring	for all ESxxxx terminals