



## EL3692 | 2-channel resistance measurement terminal 10 mΩ...10 MΩ, high-precision

The analog EL3692 input terminal enables direct resistance measurement in a wide range between 10 mΩ and 10 MΩ. The circuitry of the EtherCAT Terminal enables measurement in 2- and 4-wire versions. The EL3692 offers measuring range selection, either automatic or through the controller. Due to the galvanic isolation of 1500 V between the field side and the E-bus, in single-channel mode measurements can be carried out at live points (within the permissible range). The EtherCAT Terminal indicates its state through LEDs. Malfunctions such as broken wires are indicated by error LEDs.

Technical data	EL3692
Number of inputs	2
Power supply	via the E-bus
Technology	2- or 4-wire, resistance measurement
Distributed clocks	–
Internal resistance	> 100 MΩ
Input filter limit frequency	100 Hz
Wiring fail indication	yes
Conversion time	typ. 10...400 ms, dependent on measuring range and settings
Measuring range	10 mΩ, 1 Ω, 10 Ω, 100 Ω, 1 kΩ, 10 kΩ, 100 kΩ, 1 MΩ, 10 MΩ
Range switching	automatic or through control
Resolution	24 bit
Measuring error	< ±0.5 % (relative to the respective full scale value with 4-wire connection)
Electrical isolation	1500 V (E-bus/signal voltage)
Current consumption power contacts	–
Current consumption E-bus	typ. 220 mA
Configuration	via the controller
Special features	automatic range selection, pulse and continuous measurement
Weight	approx. 55 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
Approvals	CE, UL

Related products	
<b>EL3692-0020</b>	2-channel resistance measurement terminal 10 mΩ...10 MΩ, high-precision, with calibration certificate