



EL3104 | 4-channel analog input terminal -10...+10 V

The EL3104 analog input terminal processes signals in the range between -10 and +10 V. The voltage is digitised to a resolution of 16 bits, and is transmitted, electrically isolated, to the higher-level automation device. The input channels of the EL3104 EtherCAT Terminal are differential inputs. The signal state of the EtherCAT Terminal is indicated by light emitting diodes.

Technical data	EL3104 ES3104
Number of inputs	4 (differential)
Power supply	via the E-bus
Technology	differential input
Signal voltage	-10...+10 V
Oversampling factor	–
Distributed clocks	yes
Distributed clock precision	<< 1 µs
Internal resistance	> 200 kΩ
Input filter limit frequency	5 kHz
Common-mode voltage U_{CM}	35 V max. (relative to GND power contact)
Conversion time	~ 100 µs
Input signal bandwidth	–
Resolution	16 bit (incl. sign)
Measuring error	< ±0.3 % (relative to full scale value)
Electrical isolation	500 V (E-bus/signal voltage)
Current consumption power contacts	–
Current consumption E-bus	typ. 130 mA
Bit width in the process image	inputs: 16 byte
Configuration	no address or configuration setting
Special features	standard and compact process image, switchable measuring data representation, activatable FIR/IIR filters, limit value monitoring
Weight	approx. 65 g
Operating/storage temperature	-25...+60 °C/-40...+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
Approvals	CE, UL, Ex, IECEx