



EL3144 | 4-channel analog input terminal 0...20 mA, single-ended, 16 bit

The EL3144 analog input terminal processes signals in the range between 0 and 20 mA. The current is digitised to a resolution of 16 bits and is transmitted (electrically isolated) to the higher-level automation device. The EL3144 EtherCAT Terminal features 2-wire conductors for the four single-ended inputs with a common internal ground potential. The power contacts are connected through. The signal state of the EtherCAT Terminal is indicated by light emitting diodes.

Technical data	EL3144 ES3144
Number of inputs	4 (single-ended)
Power supply	via the E-bus
Technology	single-ended
Signal current	0...20 mA
Oversampling factor	–
Distributed clocks	yes
Distributed clock precision	<< 1 μs
Internal resistance	85 Ω typ. + diode voltage
Input filter limit frequency	5 kHz
Dielectric strength	max. 30 V
Conversion time	~ 40 μs
Input signal bandwidth	see input filter
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 required
Special features	standard and compact process image, switchable measuring data representation in the EL3142-0010, activatable FIR/IIR filters, limit value monitoring
Weight	approx. 60 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