



EL3112-0011 | 2-channel analog input terminal -20...+20 mA, differential input, 16 bit

The EL3112-0011 analog input terminal processes signals in the range between -20 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 input channels of the EtherCAT Terminal have differential inputs and possess a common, internal ground potential. The EL3112-0011 combines two channels in one housing. Overload condition is detected, and the terminal status is relayed to the controller via the E-bus. The error LEDs indicate an overload condition.

Technical data	EL3112-0011
Number of inputs	2 (differential)
Power supply	via the E-bus
Signal current	-20...+20 mA
Oversampling factor	–
Distributed clocks	yes
Distributed clock precision	<< 1 µs
Internal resistance	typ. < 85 Ω
Input filter limit frequency	5 kHz
Common-mode voltage U_{CM}	10 V max.
Conversion time	~ 50 µs (fast mode ~ 35 µs)
Input signal bandwidth	see input filter
Resolution	16 bit (incl. sign)
Measuring error	< ±0.3 % (relative to full scale value)
Surge voltage resistance	35 V DC
Electrical isolation	500 V (E-bus/signal voltage)
Current consumption power contacts	–
Current consumption E-bus	typ. 170 mA
Bit width in the process image	inputs: 8 byte
Special features	standard and compact process image, activatable FIR/IIR filters, limit value monitoring
Weight	approx. 55 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
Approvals	CE, UL, Ex

Related products	
EL3112	2-channel analog input 0...20 mA, differential input, 16 bit
ELM3102-0000	2-channel analog input terminal -20/0/+4...+20 mA, 24 bit, 20 ksp/s, push-in, service plug, 2-pin
ELM3104-0000	4-channel analog input terminal -20/0/+4...+20 mA, 24 bit, 10 ksp/s, push-in, service plug, 2-pin