



EL3632 | 2-channel analog input terminal for Condition Monitoring (IEPE)

Accelerometers with IEPE interface can be directly connected to the EL3632 EtherCAT Terminal. The measuring signals are analysed on the PC via the TwinCAT library. This enables all benefits of the PC platform, such as performance and flexibility, to be fully utilised. Alternatively, custom software can be used for the analysis. The terminal can be adapted to individual requirements through configurable filters and supply currents.

A galvanically isolated measurement configuration can be achieved using the EL9560. Through interfacing via EtherCAT and support of the distributed clocks function, the measurement results – and any detected defects – can be precisely allocated to an axis position.

Technical data	EL3632
Number of inputs	2
Technology	Condition Monitoring (IEPE), oversampling recording
Signal voltage	IEPE constant current supply and recording of modulated AC voltage
Distributed clocks	yes
Input filter limit frequency	analog parameterisable 5th order low-pass filter up to 25 kHz, typically 0.05 Hz high-pass filter
Conversion time	20 μ s (max. 50 ksamples/s)
Measuring range	default ± 5 V up to 25 kHz, ± 250 mV up to 10 Hz
Power supply Uv	24 V DC via power contacts
Sensor voltage	max. power contact voltage less 1 V
Sensor state monitoring	yes, through monitoring of the bias voltage
Supply current I _{EXCITE}	typ. 2/4/8 mA (separately configurable for both channels)
Input	single-ended
Resolution	16 bit (incl. sign)
Measuring error	< ± 0.5 % (DC; relative to full scale value)
Current consumption power contacts	24 V, typ. 20 mA + load
Current consumption E-bus	typ. 220 mA
Special features	automatic anti-aliasing function, wire breakage detection
Weight	approx. 60 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/see documentation
Approvals	CE, UL, Ex

Related products	
EL3632-0020	2-channel analog input terminal for Condition Monitoring (IEPE), with calibration certificate
ELM3602-0002	2-channel IEPE analysis, 24 bit, 50 ksps, BNC, shielded
ELM3604-0002	4-channel IEPE analysis, 24 bit, 20 ksps, BNC, shielded