



## EL5001 | SSI encoder interfaces

The EL5001 SSI interface EtherCAT Terminal allows an SSI encoder to be connected directly. The interface circuit generates a pulse for reading the encoder and makes the incoming data stream available to the controller as a data word in the process image. Various operating modes, transmission frequencies and bit widths can be permanently stored in a control register.

Technical data	EL5001   ES5001
<b>Technology</b>	SSI encoder interface
<b>Number of channels</b>	1
<b>Encoder connection</b>	D+, D-, CI+, CI-
<b>Signal output (pulse)</b>	difference signal (RS422)
<b>Signal input (data)</b>	difference signal (RS422)
<b>Power supply</b>	24 V via power contacts
<b>Current consumption</b>	typ. 20 mA without encoder
<b>Encoder supply</b>	24 V DC via power contacts
<b>Data transfer rates</b>	variable up to 1 MHz, 250 kHz default
<b>Serial input</b>	24 bit width (variable)
<b>Data direction</b>	read
<b>Bit width in the process image</b>	1 x 32 bit input, 8 bit status
<b>Current consumption power contacts</b>	typ. 20 mA
<b>Current consumption E-bus</b>	typ. 120 mA
<b>Distributed clocks</b>	yes
<b>Special features</b>	adjustable baud rate, coding and data length
<b>Electrical isolation</b>	500 V (E-bus/field potential)
<b>Weight</b>	approx. 55 g
<b>Operating/storage temperature</b>	-25...+60 °C/-40...+85 °C
<b>Relative humidity</b>	95 %, no condensation
<b>Vibration/shock resistance</b>	conforms to EN 60068-2-6/EN 60068-2-27
<b>EMC immunity/emission</b>	conforms to EN 61000-6-2/EN 61000-6-4
<b>Protect. class/installation pos.</b>	IP 20/variable
<b>Pluggable wiring</b>	for all ESxxxx terminals
<b>Approvals</b>	CE, UL, Ex

Related products	
<a href="#">EL5001-0011</a>	SSI monitor terminal, no clock output (simply listening)
<a href="#">EL5002</a>	2-channel SSI encoder interface