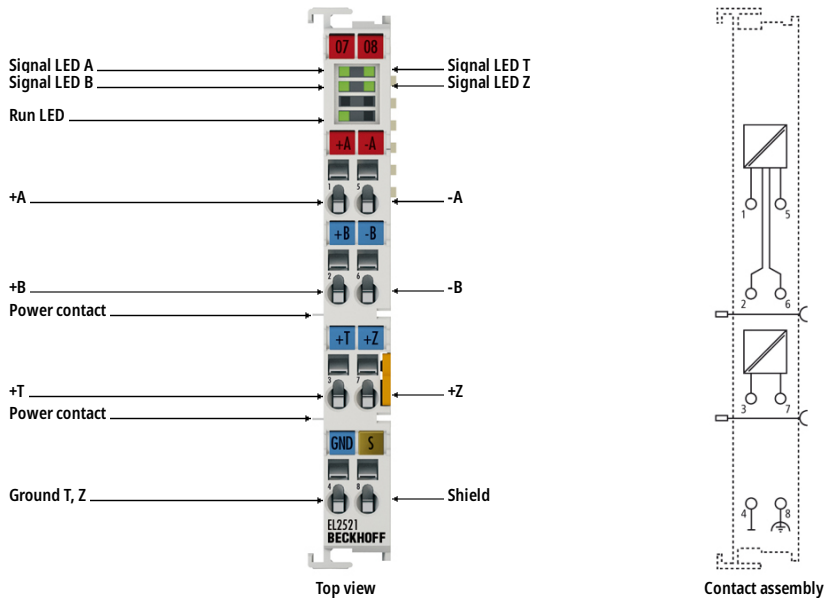
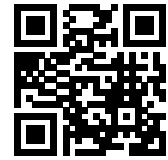


# EL2521 | EtherCAT Terminal, 1-channel pulse train output, incr. enc. simulation, RS422, 50 mA



**i Product status:** Regular delivery

The EL2521-xxx output terminals change the frequency of a binary signal and output it (electrically isolated from the K-bus). The frequency is preset by a 16 bit value from the automation device. The signal state of the EtherCAT Terminal is indicated by light emitting diodes. The LEDs are clocked with the outputs and each displays an active output.

Special features:

- Pulse train (frequency output)
- Different operating modes
  - Frequency modulation
  - Pulse direction setting
  - Incremental encoder simulation (2x AB)
- Integrated path control
- Synchronized operation through distributed clocks XFC technology possible
- Different output specifications possible
  - RS422 version, 5 V DC level

## Product information

### Technical Data

Technical data	EL2521, ES2521
Connection technology	pulse train (frequency output)
Number of outputs	1 channel (2 differential outputs A, B)

Number of inputs	2 (+T, +Z)
Load type	min. 120 Ω
Distributed clocks	yes
Input specification	24 V DC
Output specification	RS422, differential
Signal voltage	RS422 level
Max. output current	RS422 specification, 50 mA
Short-circuit current	short-circuit proof
Base frequency	0...500 kHz, 50 kHz default
Resolution	max. 15 bit (16 bit + sign)
Step size	10 mHz
Current consumption E-bus	typ. 280 mA (load-dependent)
Electrical isolation	500 V (E-bus/field potential)
Current consumption power contacts	–
Bit width in the process image	14 byte output, 8 byte input
Configuration	configuration via controller
Special features	different modes, ramp function, travel distance control
Weight	approx. 50 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. rating/installation pos.	IP20/variable
Pluggable wiring	for all ESxxx terminals
Approvals/markings	CE, UL, ATEX
Ex marking	II 3 G Ex nA IIC T4 Gc

Housing data	EL-12-8pin	ES-12-8pin
Design form	compact terminal housing with signal LEDs	terminal housing with pluggable wiring level
Material	polycarbonate	
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm	
Installation	on 35 mm DIN rail, conforming to EN 60715 with lock	
Side by side mounting by means of	double slot and key connection	
Marking	labeling of the BZxxx series	
Wiring	solid conductor (e), flexible conductor (f) and ferrule (a): spring actuation by screwdriver	

Connection cross-section	s*: 0.08...2.5 mm <sup>2</sup> , st*: 0.08...2.5 mm <sup>2</sup> , f*: 0.14...1.5 mm <sup>2</sup>	s*: 0.08...1.5 mm <sup>2</sup> , st*: 0.08...1.5 mm <sup>2</sup> , f*: 0.14...1.5 mm <sup>2</sup>
Connection cross-section AWG	s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16	s*: AWG 28...16, st*: AWG 28...16, f*: AWG 26...16
Stripping length	8...9 mm	9...10 mm
Current load power contacts	I <sub>max</sub> : 10 A	

\*s: solid wire; st: stranded wire; f: with ferrule

## Ordering Information

Ordering information	
EL2521	EtherCAT Terminal, 1-channel pulse train output, incr. enc. simulation, RS422, 50 mA
EL2521   ES2521	EtherCAT Terminal, 1-channel pulse train output, incr. enc. simulation, RS422, 50 mA, pluggable wiring