

APPLICATIONS

- > Biotechnology
- > Medical devices
- > Defence
- > Microscopy
- > Laboratory automation
- > Materials characterisation
- > digital imaging
- > Recreational equipment
- > Photonics

KEY FEATURES

- > All-in-one stepping piezo driver and controller
- > Single channel
- > Quadrature encoder interface
- > USB interface

RELATED PRODUCT

- > Stepping piezo-motors
- > Stepping piezo-mechanisms



SPECIFICATIONS

PARAMETER	TYPICAL VALUE	UNIT
> General		
Function	All-in-one driver and controller for stepping piezo-motors and mechanisms	
Number of control channels	1	
Integrated sensor conditioning (1)	Quadrature encoder interface	
Digital communication	USB	
Graphical User Interface (GUI)	CTEC IHM SPC45	
> Digital control		
Control strategy	Step by step motion	
Sampling rate	10	kSps
Digital resolution	16	bits
Stepping piezo-motor signals	Sawtooth-like	
> Analog inputs		
Number of analog inputs	1	
Voltage range	0 ... 5	V
> Analog outputs		
Number of analog outputs	1	
Voltage range	0 ... 5	V
Output impedance	30	Ohm
Max output current	10	mA

SPECIFICATIONS

PARAMETER	TYPICAL VALUE	UNIT
> Quadrature encoder interface		
Number of channels	1	
Counting mode	×4	
Inputs (2)	Digital ABZ single ended	
Digital input voltage	0 ... 5	V
Sensor supply output voltage	5	Vdc
Maximum sensor supply output current	200	mA
Counter range	0 ... 65535	
> Piezo driver		
Number of channels	1	
Nominal output voltage range	5 ... 96.5	V
Peak output current	0.15	A
> Protections		
Overtemperature		
Overload		
> Power supply		
Supply voltage	9 ... 24	Vdc
Supply current	0.1 ... 0.56	Arms
Power consumption	2.4 ... 5	W

MISCELLANEOUS

Mass	0.11	kg
Dimensions	91 × 66 × 22	mm3
Cooling	Natural convection	
Operating temperature range	0 ... 40	°C

INTERFACES

Main connector	ERNI Mini bridge series 8pins Right angle male pitch 1.27 mm	
Mechanism connector	ERNI Mini bridge series 8pins Right angle male pitch 1.27 mm	
Communication	USB mini-B female	
Power supply connector	Jack with 2.1 mm diameter pin	

INCLUDED ACCESSORIES

USB cable	USB mini-B male to USB A male	
AC/DC adapter	With different plugs	
CTEC IHM SPC45	Windows compatibility	

ANNOTATIONS

(1) Sensor gain adjustable through GUI

(2) Z unused in standard

