

Q-Motion® Piezo Motor / PiezoMike Drive Electronics

Drives up to 4 Linear Actuators, Benchtop Device



E-872.401

- For positioners with Q-Motion® piezo inertia drives and PiezoMike linear actuators
- Inexpensive, scalable multi-channel concept
- Integrated interfaces: TCP/IP, USB, USB for joystick, digital I/O
- Extensive software support

Drive electronics for 4 piezo mechanics

Drivers for inertia drives (Q-Motion® and PiezoMike) without position sensor (open-loop operation). Drives up to 4 linear actuators: The integrated amplifier drives one axis at a time; switching between the channels is done via commands. Special variant is possible on request for operating up to 64 channels via external module.

Features

Full-step and linear mode. Interfaces: TCP/IP, USB, USB for joystick, digital I/O.

Extensive functions, software support

Powerful macro command language. Nonvolatile macro storage, e.g., for stand-alone operation with autostart macro. Data recorder. ID chip detection for fast startup. Extensive software support, e.g., for LabVIEW, C, C++, MATLAB, python. PIMikroMove user software.

Specifications

E-872.401	
Function	Driver electronics for Q-Motion® positioners and PiezoMike linear actuators; benchtop device
Drive type	Piezo inertia drive
Channels	4 scalable to 64 channels via external module (on request)
Supported functions	Full-step mode, linear mode (analog control)
Amplifier	
Amplifier channels	1 drives one axis at a time, the switching between the drive channels is done via commands
Output voltage	0 to 100 V
Peak power	30 W
Output current / channel (<5 ms)	±650 mA
Interfaces and operation	
Communication interfaces	USB, Ethernet
Actuator connection	4 x LEMO connector, 3-pin
Digital inputs	TTL inputs for commanding and configuration
Digital output	Error status
Command set	PI General Command Set (GCS)
User software	PIMikroMove
Application programming interfaces	API for C / C++ / C# / VB.NET / MATLAB / python, drivers for LabVIEW
Display and indicators	LED indicator for status and operation
Manual control	Joystick via USB
Miscellaneous	
Operating temperature range	0 to 50 °C
Overtemperature protection	Deactivation at 75 °C
Dimensions	147 mm × 125 mm × 40 mm
Mass	0.46 kg
Operating voltage	24 V (power adapter in the scope of delivery)
Max. power consumption	35 W

Ordering Information

E-872.401

Q-Motion® piezomotor / PiezoMike driver electronics, benchtop device, drives up to 4 linear actuators via one amplifier channel, TCP/IP, USB, USB for joystick, digital I/O