

Q-Motion® piezomotor / PiezoMike drive electronics

4 Channels, Demultiplexing, Benchtop Device



E-872.401

- For positioners with Q-Motion® piezo inertia drives and PiezoMike linear actuators
- Inexpensive multi-channel concept: Demultiplexing for up to 64 channels as 19" housing variant possible
- Integrated interfaces: TCP/IP, USB, USB for joystick, digital I/O
- Extensive software support

Driver electronics for 1 to 4 channels, expansion up to 64 channels

4-channel multiplexed driver for stick-slip-based systems (Q-Motion® and PiezoMike) without position sensor. 1 to 4 channels, serial control via demultiplexing. Potential 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, serial control via demultiplexing up to 60 more can be controlled by an external module via demultiplexing
Supported functions	Full-step mode, linear mode (analog control)
Amplifier	E-872.401
Amplifier channels	1, serial control of 4 axes via demultiplexing
Output voltage	0 to 100 V
Peak output power	30 W
Output current / channel (<5 ms)	±650 mA
Interfaces and operation	E-872.401
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	E-872.401
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 supply in scope of delivery)
Max. power consumption	35 W

Ordering Information

E-872.401

Q-Motion® piezomotor / PiezoMike driver electronics, 4 channels, demultiplexing, benchtop device, TCP/IP, USB, USB for joystick, digital I/O