

Modular Piezo Controller

Flexible System for Piezo Actuators and Nanopositioners



E-500 • E-501

- Up to three axes; more for customized versions
- Piezo amplifier modules for low voltage and high voltage, 14 to 400 W peak power
- Position servo control modules for capacitive strain gauge sensors, 1 to 3 channels
- PC interface / display modules
- 19" and 9.5" chassis

Modular motion control system for more flexibility

Modular configuration. Supports piezo actuators, piezo-based tip/tilt platforms, and positioning systems with up to three motion axes.

Amplifiers / power amplifiers

Amplifiers / power amplifiers for piezo actuators with up to 135 V, ±250 V or 1000 V operating voltage. Amplifiers with switchable power amplifiers are available for high dynamics. High linearity, also without position feedback, can be achieved with charge-control amplifiers. Amplifier modules are offered for one to three channels per module depending on the performance class.

Sensor modules

PI uses capacitive or strain sensors in its positioning systems according to accuracy requirements. The E-500 supports operation of up to three axes with single- to three-channel sensor modules.

The flexibility of the E-500 system allows mixed operation with different single-channel amplifier or sensor modules. Control takes place either directly at the analog inputs of the amplifiers or via the interface module with digital interfaces for control via an external host.



Specifications

Model	E-500.00	E-501.00
Function	19" chassis for piezo controller system: Amplifier modules, sensor / servo control modules, interface / display modules	9.5" chassis for piezo controller system: Amplifier modules, sensor / servo control modules, interface / display modules
Channels	1, 2, 3 (max. three amplifier modules)	1, 3 (max. one amplifier module)
Dimensions	450 mm × 132 mm × 296 mm + handles	236 mm × 132 mm × 296 mm + handles
Operating voltage	90-264 V AC, 50-60 Hz	90-120 / 220-264 V AC, 50-60 Hz
Max. power consumption	180 W	80 W

Ordering Information

E-500.00

19" housing for modular piezo controller system, 1 to 3 channels

F-501.00

9.5" housing for modular piezo controller system, 1 to 3 channels

E-500.ACD

Driver set for use with NI LabVIEW software, for analog controllers