

3-Axis Flexure Stage with Controller Package



Specifications

- Total Travel Manual Drives: 4 mm (See Page 547 for Details)
- Total Travel Piezo Drives: 20 μm
- Piezoelectric Driver: 0 - 75 V
- Output Noise: 1.5 mV_{RMS}
- Output Stability: <0.01%, 5 hrs

MDT630A
(Complete System)

Our MDT630A kit comes with our MAX312D flexure stage and MDT693A 3-channel piezoelectric controller. The NanoMax™ Flexure Stage has 4 mm of coarse travel and 300 μm of fine travel controlled by the differential drives. Additionally, the unit has three piezoelectric actuators built into the housing to give an additional 20 μm at a resolution of 20 nm. The flexure design of the MAX312D ensures low crosstalk, high stability, and long-term reliability. The 3-channel controller offers a way to control the piezoelectric actuators with high stability and accuracy. The controller can be adjusted from the front panel or with the included, easy-to-use software through the RS-232 interface.

All the cables required to connect the stage to the controller are included in the kit. For more information on the MAX312D, please see page 547.

ITEM #	METRIC ITEM #	\$	£	€	RMB	DESCRIPTION
MDT630A*	MDT630A/M*	\$ 3,248.75	£ 2,339.10	€ 2,826.41	¥ 25,892.54	Complete Piezoelectric Flexure Stage and Driver

*Power Requirements 100 - 120 VAC, 50 - 60 Hz; user switchable to 220 - 240 VAC, 50 - 60 Hz operation.

Piezoelectric Kinematic Mount with Controller Package

Piezoelectric Driver

- Output Current: 60 mA per Channel
- Frequency Response: DC - 10 kHz (1.4 μF Capacitance Load)
- 3 Independent Voltage Displays
- Very Low Noise Electronics
- Turnkey System Complete with All Cables

Mechanical

- 10 arcsec Angular Resolution
- $\pm 4^\circ$ Mechanical Angular Range
- ± 3 mm Translational Range

Electro-Mechanical

- 0.06 arcsec Angular Resolution
- 30 arcsec Angular Range
- ± 4 μm Translational Range



PZ630
Complete System Includes Drive Electronics
Base and Mirror Sold Separately
See Page 102 and 767, Respectively

The PZ630 and PZ631 kits combine our KC1 Series 30 mm cage system kinematic mirror mount with piezoelectric stacks and our MDT693A 3-channel piezoelectric controller. This combination offers precise control of the angular orientation of the mirror. The manual thumb screws control the coarse angular adjustment while the piezoelectric stacks, mounted between the screw and the housing, allow for fine angular control. The combination allows for $\pm 4^\circ$ of motion with 0.06 arcsec of angular resolution. The controller can be adjusted from the front panel or with the included, easy-to-use software through the RS232 interface.

The mirror mount in both the PZ630 and PZ631 packages is compatible with Thorlabs' 30 mm cage system (starting on page 167). The PZ630 is bundled with the KC1-PZ mirror mount, which has a $\text{Ø}1.05''$ smooth bore hole to fit $\text{Ø}1''$ optics and a nylon-tipped set screw to hold it securely in place. The PZ631 is sold with the KC1-T-PZ mirror mount, which has an SM1 ($\text{Ø}1.035'' - 40$) threaded aperture for mounting $\text{Ø}1''$ optics using the two included SMIRR retaining rings to hold the optic in place. The SM1 thread allows many of our mechanical parts to be easily attached to the mount, such as our lens tubes (see pages 127 - 139) and our laser diode mounts (see pages 1481 - 1492). Both kits come with all of the cables required to connect the mount to the controller.

ITEM #	METRIC ITEM #	\$	£	€	RMB	DESCRIPTION
PZ630	PZ630-EC	\$ 2,178.60	£ 1,568.59	€ 1,895.38	¥ 17,363.44	Complete System: KC1-PZ Plus Controller
PZ631	PZ631-EC	\$ 2,179.60	£ 1,569.31	€ 1,896.25	¥ 17,371.41	Complete System: KC1-T-PZ Plus Controller

For more
info...

KC1-T-PZ
Mirror Mount



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