

Picomotor™ Large Aperture Optical Mounts



- Kinematic Mechanism
- Θ_x, Θ_y Adjustments
- Angular Resolution $<0.7 \mu\text{rad}$
- Set-and-Forget Long-Term Stability
- Clear Edge or Center Mount

The New Focus 882X series provides the precision and stability of Picomotor™ actuators with our reliable popular Ultima Precision Optical Mounts.

This new series is available in aperture versions 2.0, 3.0, or 4.0 in (50.8, 76.2, 101.6 mm) diameter optics. With the thick front and rear plates, carbide seats, and optimized stiff springs, it provides for smooth, reliable motorized adjustment while maintaining a high level of thermal and mechanical stability. The picomotor offers the additional advantage of motorized positioning of $<0.7 \mu\text{rad}$ resolution or just utilizing the integrated knobs for quick, manual adjustment.

The 8822 and 8823 versions, with the clear quadrant design, offer a versatile positioning system for mounting 2.0 and 3.0 in mirrors while providing greater beam access. The 8822-AC, 8823-AC, and 8824-AC versions, with its low-distortional axial clamping technique, minimizes mount-induced wavefront distortions.



8823



8824-AC



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Specifications

Specifications	8822	8822-L	8822-AC	8823	8823-AC	8824-AC
Optic Diameter [in. (mm)]	2.0 (50.8)	2.0 (50.8)	2.0 (50.8)	3.0 (76.2)	3.0 (76.2)	4.0 (101.6)
Type	Clear Edge	Clear Edge	Center Mount	Clear Edge	Center Mount	Center Mount
Angular Range	+/- 5°	+/- 5°	+/- 5°	+/- 3.5°	+/- 3.5°	+/- 3.5°
Cable Length [ft. (m)]				7 (2.1)		
Resolution- Angular (μrad)				0.7		
Operating Temperature				10-40 °C		
Mounting				Post		
Thread Type				8-32 (M4) CLR		
Motorized Axes				2		
Connector Type				4-Pin		

Ordering Information

Model	Description
8822	Picomotor Clear Edge Mirror Mount, 2.0 in. Diameter
8822-L	Picomotor Clear Edge Mirror Mount, 2.0 in. Diameter, Left-Handed
8822-AC	Picomotor Center Mirror Mount, 2.0 in. Diameter
8823	Picomotor Clear Edge Mirror Mount, 3.0 in. Diameter
8823-AC	Picomotor Center Mirror Mount, 3.0 in. Diameter
8824-AC	Picomotor Center Mirror Mount, 4.0 in. Diameter
8742-4-KIT	Four-Axis 8742 Picomotor Controller/Driver Kit
8745-PS	Power Supply, 8742 Controller/Driver, 12V
8745-PWR-CBL	Power Cable, 6 in. Length, 8742 Controller/Driver
8745-USB-CBL	USB Cable, 3 Meters Length, 8742 Controller/Driver
8745-STK-KIT	L-Shaped Stacking Plate Kit, 8742 Controller/Driver
8745-MTG-KIT	Optical Table Mounting Plate Kit, 8742 Controller/Driver



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Newport Corporation, Irvine, California and Franklin, Massachusetts; Evry and Beaune-La-Rolande, France and Wuxi, China have all been certified compliant with ISO 9001 by the British Standards Institution. Santa Clara, California is DNV certified.

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