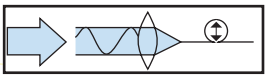
Polarization Maintaining Single Mode Fiber Launch: Easy Load

The Microscope Objective is Sold Separately (See Page 658)



Patents 6,186,016 and 6,467,762

Specifications

- **Travel:** 4mm in XYZ Directions
- **Thermal Stability:** 1µm/C°
- **Differential Adjusters:**
  - Coarse Adjust: 0.5mm/rev
  - Fine Adjust: 50µm/rev
- **Load Capacity:** 1kg (2.2lbs)
- **Rotation:** Continuous Rotation Over a Full 360°
- **High Resolution Manual Drives:** Provides 50nm of Fine Control Resolution Over a Total Range of 300µm
- **Parallel 3-Axis Flexure Mechanism:** Allows All Three Drives to be Rigidly Attached to the Main Body of the Stage
- **Cross-Talk:** 20µm/mm of Travel, Max
- **Resonant Frequency (±10% Hz):** 375Hz (No Load) 200Hz (275g Load) 150Hz (575g Load)
- **Accessories:** Mounted on the Top Deck (See Photograph) of the Stage (From Left to Right): Large Fixed Bracket, Microscope Objective Mount, and Fiber Rotator With Adjustable Clamping Force

NanoMax™ Model MAX361

The MAX361 fiber launch system is configured from our highest-performing flexure stage and three of our high-resolution, dual stage micrometers. This combination provides both the resolution and the stability required to achieve true submicron positional control. The system features the HFR007 fiber rotator which provides the added degree of rotational freedom that is required to optimize the extinction ratio of a PM fiber. By using our latest generation 3-axis translation stage, this new MAX361 polarization-maintaining fiber launch system provides a substantial improvement over linear bearing based designs or other less advanced 3-axis flexure stages. The base translator utilizes our patented, highly stable, flexure design, which has the unique feature that all three adjusters are rigidly connected to the fixed portion of the main structure of the stage. Competing products either utilize three stacked individual stages, or at best are designed as one integrated system with two of the three actuators moving along with the moving portion of the stage. This "floating" of two of the three drives causes unwanted motion in the form of cross-talk when the actuators are touched by the operators hand, thus impeding true nanopositioning.

ITEM#	METRIC ITEM #	$	£	€	RMB	DESCRIPTION
MAX361	MAX361/M	$ 1,957.50	£ 1,233.20	€ 1.820,50	¥ 18,694.10	NanoMax PM Fiber Launch System With Fast Loading Rotator

Polarization Fiber Launch: High Performance Fiber Rotator

Specifications

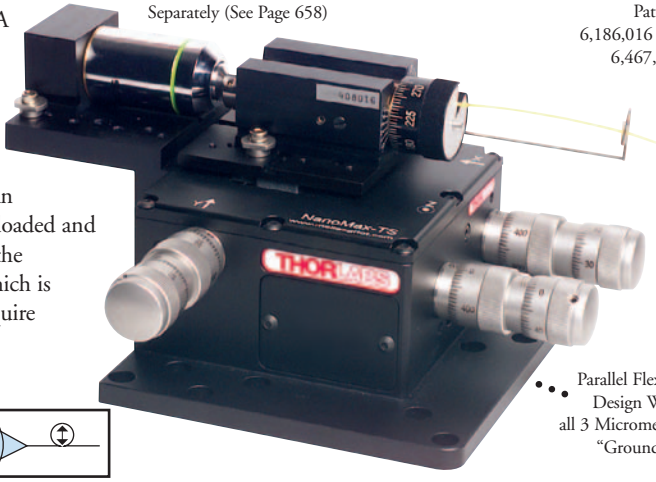
- **Travel:** 4mm in XYZ Directions
- **Thermal Stability:** 1µm/C°
- **Differential Adjusters:**
  - Coarse Adjust: 0.5mm/rev
  - Fine Adjust: 50µm/rev
- **High Resolution Manual Drives:** Provides 50nm of Fine Control Resolution Over a Total Range of 300µm
- **Load Capacity:** 1kg (2.2lbs)
- **CrossTalk:** 20µm/mm of Travel, Max
- **Repeatability:** 500nm RMS Bidirectional
- **Resonant Frequency (±10% Hz):** 375Hz (No Load) 200Hz (275g Load), 150Hz (575g Load)
- **Accessories:** Mounted on the Top Deck (See Photograph) of the Stage (From Left to Right) Large Fixed Bracket, Microscope Objective and Precision Fiber Rotator

NanoMax™ Model MAX365

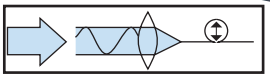
The MAX365 has all of the high performance features of the MAX361 detailed above with the addition of an enhanced fiber rotator. Rotating a fiber in a typical rotation mount can introduce 10 to 20µm of lateral core offset. Although this offset can be corrected for by making lateral movements, this action complicates the alignment procedure. Hence, it should be avoided if possible by using a precision fiber rotator. The MAX365 produces a maximum core offset of 2µm during continuous rotation. A graduated knob and vernier scale provide smooth, continuous, angular rotation through 360 degrees with a resolution (setting sensitivity) of less than one degree. The fiber is side-loaded and can also be held in place via the integrated vacuum chuck, which is ideal for applications that require quick fiber changes.

Microscope Objective Sold Separately (See Page 658)

Patents 6,186,016 and 6,467,762



Parallel Flexure Design With all 3 Micrometers "Grounded"



ITEM#	METRIC ITEM #	$	£	€	RMB	DESCRIPTION
MAX365	MAX365/M	$ 3,221.50	£ 2,029.50	€ 2.996,00	¥ 30,765.30	NanoMax PM Fiber Launch With Precision Rotator