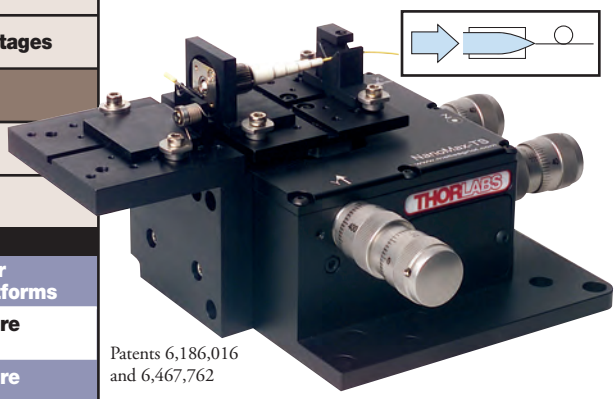
NanoMax™ SM Launch for GRIN Lenses and FC Connectors



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

When Performance Matters

When long-term stability and ease-of-use are of paramount importance, we recommend this series of NanoMax launch systems.

NanoMax™ Model MAX355

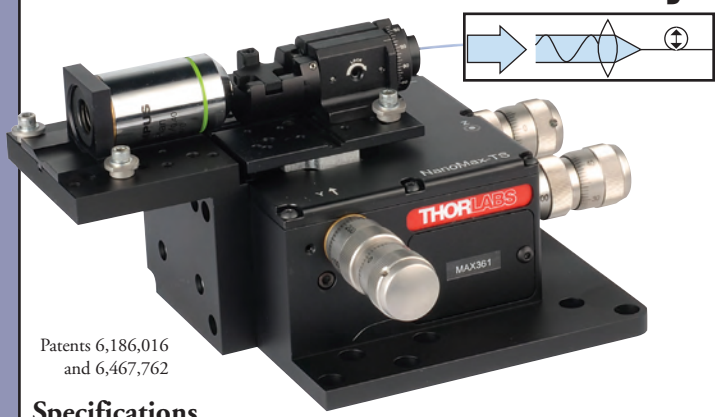
One of the most challenging alignment tasks in a photonics laboratory is the launching of light from a free-space laser into a single mode optical device or fiber, especially when the laser is operating in the visible range and the mode field diameter of the device is less than 4 µm. This MAX350 series of fiber launch systems have been redesigned to perform this task with ease. From the patented high-resolution, dual-stage adjusters (coarse range of 4 mm with <1 µm resolution, and fine range of 300 µm with <50 nm resolution) to the patented flexure design that forms the foundation of the system, this three-axis translator provides both the stability and the resolution required to hit submicron targets.

Specifications

- **Travel:** 4 mm
- **Thermal Stability:** 1 µm/°C
- **Differential Adjusters**
  - Coarse Adjustment: 0.5 mm/rev
  - Fine Adjustment: 50 µm/rev
- **High Resolution Manual Drives:** Provides 50 nm of Fine Control Resolution Over a Total Range of 300 µm
- **Repeatability:** 500 nm RMS Bidirectional
- **Load Capacity:** 2.2 lbs (1 kg)
- **Resonant Frequency (±10% Hz):** 375 Hz (No Load), 200 Hz (275 g Load), 150 Hz (575 g Load)
- **Accessories:** Mounted on the Top Deck of the Stage:
  Large Fixed Bracket (AMA009)
  Grin Lens Mount (HGI003)
  FC Optical Fiber Cable Holder (HFB004)
  Cable Strain Relief (HFS001)

ITEM#	METRIC ITEM#	$	£	€	RMB	DESCRIPTION
MAX355	MAX355/M	$ 1,850.00	£ 1,282.50	€ 1.642,50	¥ 15,622.00	NanoMax™ Fiber Launch System for FC Cables

NanoMax™ PM Fiber Launch: Easy Load



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

Specifications

- **Travel:** 4 mm
- **Thermal Stability:** 1 µm/°C
- **Differential Adjusters**
  - Coarse: 0.5 mm/rev
  - Fine: 50 µm/rev
- **Rotation:** Continuous
- **High Resolution Manual**
- **Drives:** 50 nm Fine Control Over Range of 300 µm
- **Parallel 3-Axis Flexure:** Allows All Three Drives to be Rigidly Attached to Ground
- **Load Capacity:** 2.2 lbs
- **Resonant Frequency (±10% Hz):**
  - 375 Hz (No Load)
  - 200 Hz (275 g Load)
  - 150 Hz (575 g Load)
- **Top Deck Acessories:**
  - Large Fixed Bracket (AMA009)
  - Microscope Objective Mount (HCS013)
  - Adjustable Force Fiber Clamp (HFF001)
  - Fiber Clamp with Rotation (HFR007)

When Performance Matters

When long-term stability and ease-of-use are of paramount importance, we recommend this series of NanoMax™ launch systems.

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. The MAX361 PM Fiber Launch System provides a substantial improvement over linear bearing based designs or other less advanced three-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 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	$ 1,860.00	£ 1,289.50	€ 1.651,50	¥ 15,706.00	NanoMax PM Fiber Launch System with Fast Loading Rotator