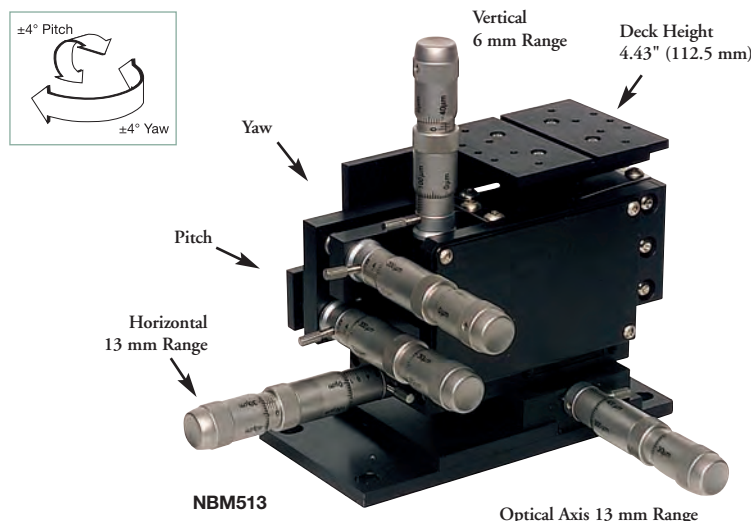


## Five-Axis NanoBlock™ Positioner 4.43"

This 5-Axis Device Platform is designed to be used in conjunction with the NanoMax™ 600 six-axis waveguide manipulator. It is well suited for applications that require an optical element or assembly to be held at a fixed position in front of a high-performance, multi-axis alignment system. The five degrees of freedom that this device offers, allow the fixed portion of the optical assembly to be positioned such that it has the proper orientation with respect to another positioning stage. The photograph below shows the NBM513 five-axis device positioner, mounted next to a high-performance 3-axis flexure platform, which is an excellent choice for applications requiring complex optical alignment routines at the nanometer level (see page 547 for details).

The NBM513 Five-axis Device Platform has flexure hinges for all of the rotational degrees of freedom; both the X and Y linear axes utilize traditional bearing stages to provide for longer travel. The top deck of the NBM513 is located 4.43" (112.5 mm) above the bottom mounting surface of the device and is designed to accept any of the accessories that are featured on pages 572 – 588.



### Specifications

#### Travel

- Coarse Travel:
  - Optical Axis (X): 0.5" (13 mm)
  - Horizontal Axis (Y): 0.5" (13 mm)
  - Vertical Axis (Z): 6 mm
  - Pitch Axis ( $\theta_x$ ): 8°
  - Yaw Axis ( $\theta_z$ ): 8°
- Fine Travel:
  - Optical Axis: 300  $\mu$ m
  - Horizontal: 300  $\mu$ m
  - Vertical: 300  $\mu$ m
  - Pitch: 30 arcmin
  - Yaw: 10 arcmin

#### Resolution

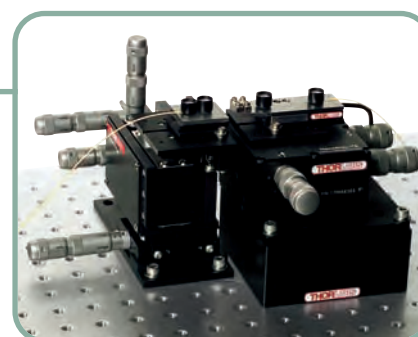
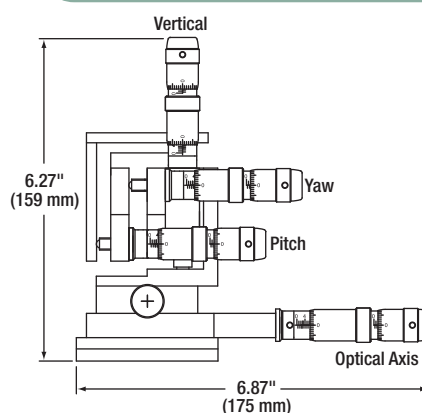
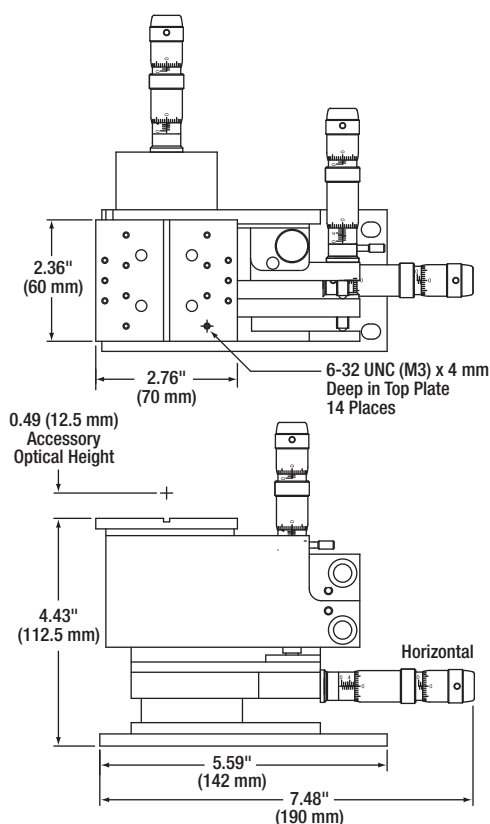
- Coarse Travel:
  - Optical Axis: 1  $\mu$ m
  - Vertical Axis: 1  $\mu$ m
  - Horizontal Axis: 1  $\mu$ m
  - Pitch Axis: 10 arcsec
  - Yaw Axis: 10 arcsec
- Fine Travel:
  - Optical Axis: 50 nm
  - Vertical: 50 nm
  - Horizontal: 50 nm
  - Pitch: 1 arcsec
  - Yaw: 1 arcsec

#### Deck Height:

4.43" (112.5 mm) to the Mounting Surface of the Moving Platform, Accessory Beam Height is 4.93" (125 mm) Measured from the Bottom Surface of the Stage

#### Load Capacity:

1.1 lbs (500 g)



 **Mechanical**  
Drawings Available on the  
**WEB**

Please refer to our website for complete models and drawings.

ITEM #	METRIC ITEM #	\$	£	€	RMB	DESCRIPTION
NBM513	NBM513/M	\$ 5,615.00	£ 4,042.80	€ 4,885.05	¥ 44,751.55	NanoBlock™ 5-Axis Device Platform, 112.5 mm Deck Height