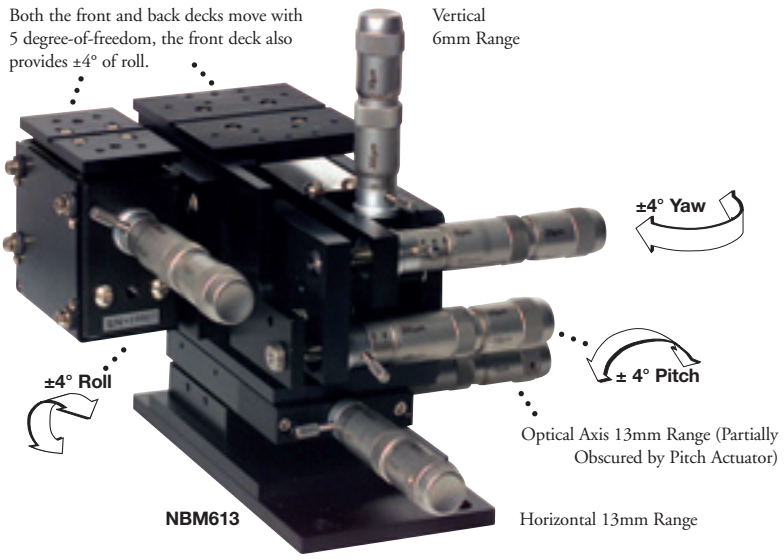
NanoBlock™ 6-Axis Device Platform, 112.5mm Deck Height

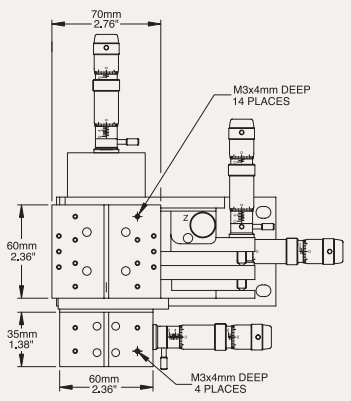


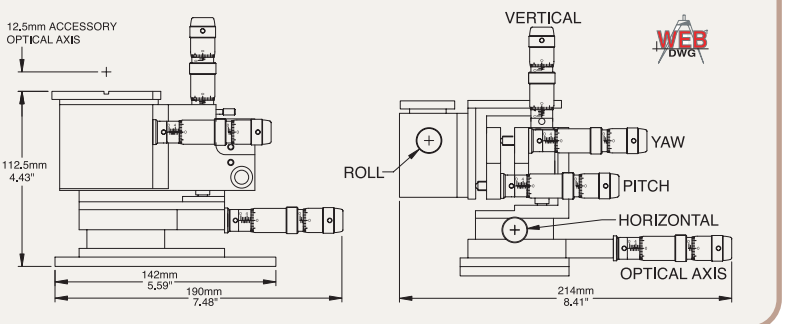
The NBM613, 6-Axis Device Platform, is the final model in this series of articulated platforms (the 4-Axis and 5-Axis systems are featured on the previous pages). This device is intended to be used in conjunction with the NanoMax™600 six axis waveguide manipulator or any of our high performance 3-Axis stages featured in the "3 Axis Flexure Stages & Accessories" chapter that starts on page 284. It is ideal for applications that require a planar optical element to be held at a fixed position in front of a high performance multi-axis alignment system. The six degrees of freedom that this device offers allows the fixed portion of the optical assembly to be positioned such that it has the proper orientation with respect to the moving optical element attached to the high performance alignment stage performing the optimization of the system. While this Device Platform can be used to aid in the optimization of the optical performance, it is generally recommended that the most sensitive alignment be accomplished with one of our NanoMax™ 300 or 600-series stages.

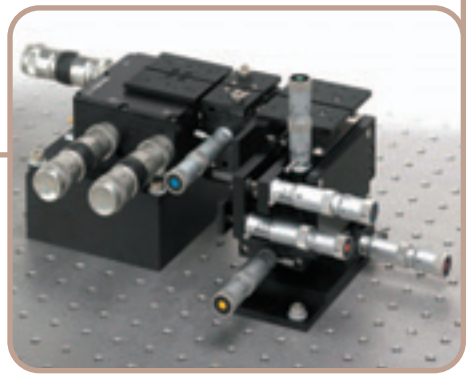
The NBM613, uses a combination of flexure hinges for all rotational degrees of freedom and traditional linear bearings for the three degrees of linear motion. The use of traditional linear bearings provides for the longer travel that is often required in order to address the needs of multi-channel devices. The top deck of the NBM613 is located at 112.5mm above the bottom mounting surface of the device and is designed to accept any of the accessories that are featured in the accessories section appearing on pages 284 through 302.

Specifications

- **Travel:**
  - Coarse Travel:
    - Optical Axis (x) 13mm
    - Horizontal Axis (y) 13mm
    - Vertical Axis (z) 6mm
    - Roll Axis (θx) 8°
    - Pitch Axis (θy) 8°
    - Yaw Axis (θz) 8°
  - Fine Travel:
    - Optical Axis 300µm
    - Horizontal Axis 300µm
    - Vertical Axis 300µm
    - Roll Axis 10 arcmin.
    - Pitch Axis 30 arcmin.
    - Yaw Axis 10 arcmin.
- **Resolution:**
  - Coarse Travel:
    - Optical Axis 1µm
    - Vertical Axis 1µm
    - Horizontal Axis 1µm
    - Roll Axis 20 arcsec.
    - Pitch Axis 40 arcsec.
    - Yaw Axis 20 arcsec.
  - Fine Travel:
    - Optical Axis 50nm
    - Vertical Axis 50nm
    - Horizontal Axis 50nm
    - Roll Axis 1 arcsec.
    - Pitch Axis 2 arcsec.
    - Yaw Axis 1 arcsec.
- **Deck Height:** 112.5mm from the stage bottom to the mounting surface of the moving platform. The accessory beam height is 125mm measured from the bottom surface of the stage.







The photograph shown includes an NBM613 Device Platform on the right, as well as a 3-Axis NanoMax stage on the left. This configuration allows an optical element mounted on the center platform to be rotated and translated about all six directions, three translation, and three rotation.

ITEM#	METRIC ITEM #	$	£	€	¥	DESCRIPTION
NBM613	NBM613 /M	$ 7,284.01	£ 4,284.71	€ 6.427,06	¥ 1,199,719	NanoBlock™ 6-Axis Device Platform, 112.5mm Deck height