



PI's Compact Higher Performance Hexapod

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PI PRESS RELEASE

New Compact Hexapod with Higher Performance for Industrial Alignment Applications

Designed to deliver 2x velocity and 8x higher resolution

June 2017, Auburn, MA – PI has added a higher performance model to its range of compact hexapods. The New H-811.i2 provides twice the velocity along with sensor resolution up to 8 times higher compared to the current H-811.D2 miniature hexapod. The compact size, robust design with low friction ballscrews brushless motors, and powerful controller with multi-axis alignment capabilities make the new hexapod an ideal tool for high duty cycle alignment applications in optics, automotive and photonics applications.

How do Hexapod Parallel Motion Systems work?

Hexapods are 6 DOF positioning / motion systems that derive 6-axis movement (XYZ, pitch, yaw, roll) from actuators placed in parallel between a top and bottom platform. Available in a variety of sizes with bases ranging from 50mm to 1m and different load capabilities up to 2 tons, PI hexapods are an easy solution to complex multi-axis precision motion applications. PI hexapods come with state-of-the-art controllers and software tools based on 25 years of hexapod R&D, resulting in fast solution implementation to a plethora of applications from medical to photonics. All 6 axes can be commanded simply as Cartesian coordinates, and the center of rotation can be changed on the fly with a software command. Other advantages are the absence of friction and torque, caused by dragged cables.

Read technical articles and applications of PI hexapods >

<http://www.pi-usa.us/blog/category/hexapods/>

Features & Advantages

- 6-Axis System (XYZ, Theta X, Y, Z)
- Travel ranges to 34mm linear / 42° rotary
- Strut Resolution: 5 Nanometers
- Load capacity to 11 lbs

- Repeatability to $\pm 0.06 \mu\text{m}$
- Velocity to 20 mm/sec

Specifications, Datasheets, More Information >

http://www.pi-usa.us/products/Micropositioning_Stage_Hexapod/hexapod-6-axis-stage.php#mini

Standard and Custom

PI has in-house engineered solutions with over 4 decades of experience working with customers to provide products that meet application demands, and can quickly modify existing product designs or provide a fully customized OEM part to fit the exact requirements of the application.

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About PI

PI is a leading manufacturer of air bearing stages, piezoelectric solutions, precision motion control equipment, and hexapod parallel-kinematics for semiconductor applications, photonics, bio-nano-technology and medical engineering. PI has been developing and manufacturing standard & custom precision products with piezoceramic and electromagnetic drives for 4 decades. The company has been ISO 9001 certified since 1994 and provides innovative, high-quality solutions for OEM and research. The PI group employs more than 1,000 people worldwide in 15 subsidiaries and R&D / engineering centers on 3 continents.

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