



PI's Multi-Axis Q-845 and N-865

Click [here](#) for high res image file

PI PRESS RELEASE

Planar, Parallel Motion Basis for New 6-Axis Positioning Systems

Industries such as micro-assembly, semiconductor testing, and automated photonics packaging require multi-axis motion with nanometer precision and dependability.

July 2017, Auburn, MA – Worldwide nanopositioning equipment leader PI (Physik Instrumente) has engineered and released two new compact multi-axis positioning stages based on low-profile parallel-kinematic motion devices. Driven by piezo ceramic motors, nanometer precision is achieved along with high stability based on low heat generation and a drift free auto-position-clamping feature.

N-865 High End – Low Profile 6-Axis Motion Platform, 2 Nanometer Minimum Incremental Motion

This high-end system is based on proprietary PiezoWalk® linear motor technology. It provides 2 nanometer minimum incremental motion in X, Y, Z with 0.2 microradian angular motion in Pitch, YAW, and Roll. The N-865 can support loads up to 15N. Integrated proprietary linear encoders measure the position with 0.5 nanometers resolution.

Q-845 Compact 6-Axis Motion Platform, 6 Nanometer Minimum Incremental Motion

The Q-845 is high performance, compact 6-axis system based on piezo inertia drives, providing minimum incremental motion as small as 6 nanometers. Integrated linear encoders measure the position with 1 nanometer resolution and provide feedback to the 6-axis controller. The Q-845 supports loads to 10 N and achieves velocities up to 5mm/sec.

Virtual, Programmable Pivot Point

Both 6-axis systems provide software programmable virtual pivot points – a decisive feature for alignment processes such as required in SiP and micro-optics applications.

Specifications, Datasheets, More Information>

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

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.

USA / Canada

<http://www.pi-usa.us> | info@pi-usa.us

East

(508) 832-3456

Midwest

(508) 832-3456

West

(949) 679-9191 (LA Area & Mexico)

(408) 533-0973 (Silicon Valley/Bay Area)

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.

- > [READ the PI Tech Blog](#)
- > [WATCH PI Videos on YouTube](#)
- > [FOLLOW PI on Twitter](#)