



NEW PI's V-731 low-profile metrology XY stage

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PI PRESS RELEASE

Dynamic Positioning & Scanning Delivered in Integrated XY Linear Motor Drive

This new planar drive is designed for the nanopositioning demands of metrology and precision automation applications.

June 2017, Auburn, MA – Precision motion control and nanopositioning industry leader PI (Physik Instrumente) now offers a new reference class XY stage in its PIMag® series of high dynamics linear motor stages with the V-731, equipped with incremental linear encoders for direct position measurement and 3-phase electromagnetic linear motors. Fields of application include micro-assembly, biotechnology, precision laser machining, optics, lens testing, and photonics alignment.

Design with ironless linear motors improves smoothness

The proprietary PIMag stages do not require mechanical components in the drivetrain as the force is transmitted directly by magnetic forces to the motion platform, without friction and zero-wear on the drive. The ironless, non-cogging linear motors provide very smooth motion, and a high dynamic velocity range along with rapid acceleration. They are ideal for applications where high or extremely constant velocity is required and reliability and maximum uptime are crucial.

Read tech blog, *High Performance Motion Control – Systems Approach Provides Nanometer Precision for Industrial Applications* >

<http://www.pi-usa.us/blog/high-performance-motion-control-systems-approach-provides-nanometer-precision-for-industrial-applications/>

Excellent guiding accuracy: 8" travel range

The V-731 stage is equipped with integrated linear encoders providing 10 nanometers resolution. Precision crossed roller bearings with anti-creep cage assist guarantee excellent repeatability to 100 nanometers from this compact low profile stage, measuring only 310x310x80mm.

Specifications, datasheets, more information >

http://www.pi-usa.us/products/precision_positioning_pi-micos/XY_Precision_Positioning_Stage_Mc.php#V731

Standard and custom

PI has over 4 decades of experience providing in-house engineered precision motion control solutions, and can quickly modify existing product designs or provide a fully customized OEM part to fit the exact requirements of the customer's 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.

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