Vertical Lift Stage Offers 2 nm Resolution

Aerotech’s ANT130-5-V is a linear-motor-driven wedge-style vertical lift stage that provides the exceptional resolution, accuracy, and in-position stability required in nanopositioning applications, all while offering travel up to 5 mm. It is a precision stage that is perfectly at home in industrial applications. The ANT130-5-V was designed for stand-alone use or can be seamlessly integrated with other stages in the Aerotech ANT stage family for a superior multi-axis nanopositioning system.

ANT130-5-V stages utilize advanced direct-drive technology, pioneered by Aerotech, as well as anti-creep crossed-roller bearings to achieve the highest level of positioning performance. Aerotech direct-drive technology is non-cogging, noncontact, high-speed, high-resolution, and high-accuracy. The lack of hysteresis or backlash enables accurate and repeatable nanometer motion. The unique drive and bearing combination, packaged in an extremely compact profile and footprint, offers tangible advantages in high-precision positioning applications such as disk-drive fabrication, fiber alignment, optical delay element actuation, sensor testing, and scanning processes that demand smooth, precise, stable, and repeatable motion.

The ANT130-5-V family has universal mounting and tabletop patterns that allow for easy system integration. Two, three, or more axes can be easily combined for flexible system designs and multi-axis configurations.

Outstanding accuracy, position repeatability, and in-position stability require high system resolution. The ANT130-5-V stage’s industry-leading 2 nm minimum incremental step size provides this high level of performance.

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The ANT130-5-V series data sheet is available at:
http://www.aerotech.com/products/NANO/ant1305v.html [2]

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[2] http://www.aerotech.com/products/NANO/ant1305v.html