

PRECISION 3 TO 6 AXIS PHOTONICS ALIGNMENT PLATFORM

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Ultra-Precision Direct-Drive:

FiberMaxHP noncontact direct-drive technology enables high-precision alignment without sacrificing production throughput. It is capable of 2 nm linear and 0.05 μ rad rotary minimum incremental motion, with speeds to 400 mm/s, to meet the challenges of aligning next-generation photonics packages. The direct-drive technology employed in FiberMaxHP offers a significant precision and throughput advantage over other alignment platforms.

Powerful Kinematics and Scanning Routines:

Aerotech's controllers work with a variety of smart cameras and machine vision systems to help facilitate first light. Our power servo scanning algorithms can be called to optimize power coupled through the devices. Standard scanning routines include fast align, hill climb, spiral, and raster searches in up to six axes of motion.

Our advanced kinematics enable a virtual pivot point where rotation can occur at any user-defined point in space rather than the physical rotation point of the FiberMaxHP axes. This assists the speed and accuracy of active alignment. We have an extensive array of software and hardware options to suit your specific needs.

Flexible System Configuration:

The FiberMaxHP is available with 3-6 axes of direct-drive alignment allowing the platform to be specified with the exact number of axes needed for the application. Since many applications require manual adjustment of fixtures and parts for a one-time initial alignment, the FiberMaxHP comes with 1-3 axes of manual angular alignment with $\pm 2^\circ$ of motion. These manual adjustment axes mount directly to the direct-drive platform and offer a more economical approach to alignment when adjustment is not frequently required.

Aerotech has many years of experience providing solutions to the photonics industry. We realize that your application may be unique and require customization. The FiberMaxHP is a modular design and can be easily customized with special arrangement of axes, fixturing, and mounting patterns to meet the needs of your specific application.

For further information, please contact Roger Burg at 734-878-4285 (direct), or via e-mail at rburg@aerotech.com.

About Aerotech

Since 1970, Aerotech has designed and manufactured the highest performance [motion control](#), [positioning tables/stages](#), and positioning systems for our customers in industry, government, science, and research institutions around the world. Aerotech's precision [motion control products](#) provide the critical performance for today's demanding applications in markets such as medical device and life sciences, semiconductor and flat panel, photonics, automotive, data storage, laser processing, military/aerospace, electronics manufacturing, test, assembly, research and development, and other markets requiring high precision, high throughput motion solutions.