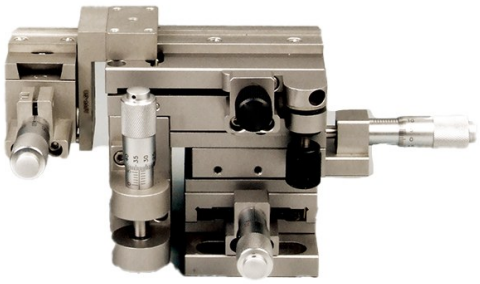
NFP-x561 Series Stainless Steel Fiber Alignment Stages, 3/5/6-Axis, ≤1 µm

Model NFP-x561 Series · waveqvanta.com/products/nfp-x561-series-stainless-steel-fiber-alignment-stages

Stainless steel crossed-roller stages and add-on angular modules for precise manual fiber alignment.



The NFP-x561 series is a modular family of manual fiber alignment stages built from 304 stainless steel. The NFP-3561 XYZ stage provides 13 × 13 × 6 mm travel on crossed-roller guides with ≤1 µm sensitivity, and can be combined with the NFP-GON10 goniometer (θx) or the NFP-2561T two-axis tilt stage (θy/θz); the NFP-5561 and NFP-6561 integrate these motions into 5- and 6-axis units.

Key features

- 304 stainless steel body with sandblasted finish for stability and corrosion resistance
- Crossed-roller guided XYZ axes: 13 / 13 / 6 mm travel, ≤1 µm sensitivity, ≤3 µm linearity deviation
- NFP-GON10 goniometer: θx ±10°, ≤6″ sensitivity, dovetail mounting seat for fiber accessories
- NFP-2561T/TL tilt stage adds pitch and yaw: θy −2° to +4°, θz −4° to +4°
- Integrated 5-axis (NFP-5561) and 6-axis (NFP-6561) versions
- Right-hand drive as standard; left-hand versions with L (or TL) suffix

Specifications

Configurations	Goniometer (GON10), 2-axis tilt (2561T), XYZ (3561), 5-axis (5561), 6-axis (6561)
Linear Travel (X / Y / Z)	13 / 13 / 6 mm (NFP-3561, NFP-5561, NFP-6561)
θx Range	±10° (NFP-GON10, NFP-6561)
θy Range	−2° to +4° (NFP-2561T, NFP-5561, NFP-6561)
θz Range	−4° to +4° (NFP-2561T, NFP-5561, NFP-6561)
Linear Sensitivity	≤1 µm
Angular Sensitivity (NFP-GON10)	≤6″
Linearity Deviation	≤3 µm (models with linear axes)
Guide Mechanism	Crossed-roller guide (linear); rotation structure (θy/θz); dovetail guide (θx)
Drive Type	Micrometer (GON10, 3561); screw (2561T); micrometer + screw (5561, 6561)
Drive Location	Right (standard); left with L suffix (TL for the 2-axis tilt stage)
Body Material and Finish	304 stainless steel, sandblasted
Weight	0.31–2.5 kg

Model overview

Model	Axes	X / Y / Z (mm)	θx (°)	θy (°)	θz (°)	Guide	Drive	Sensitivity	Weight (kg)
NFP-GON10	θx	–	±10	–	–	Dovetail	Micrometer	≤6″	0.31
NFP-2561T / TL	θy θz	–	–	−2 to +4	−4 to +4	Rotation structure	Screw	–	1.2
NFP-3561 / 3561L	XYZ	13 / 13 / 6	–	–	–	Crossed-roller	Micrometer	≤1 µm	1.8
NFP-5561 / 5561L	XYZ θy θz	13 / 13 / 6	–	−2 to +4	−4 to +4	Crossed-roller + rotation	Micrometer + screw	≤1 µm	2.2

Model	Axes	X / Y / Z (mm)	θx (°)	θy (°)	θz (°)	Guide	Drive	Sensitivity	Weight (kg)
NFP-6561 / 6561L	XYZ θx θy θz	13 / 13 / 6	±10	−2 to +4	−4 to +4	Crossed-roller + rotation + dovetail	Micrometer + screw	≤1 μm	2.5

Typical applications

- Optical fiber alignment and coupling
- Optical waveguide device alignment
- Fiber-optic component assembly
- Photonic device packaging and testing