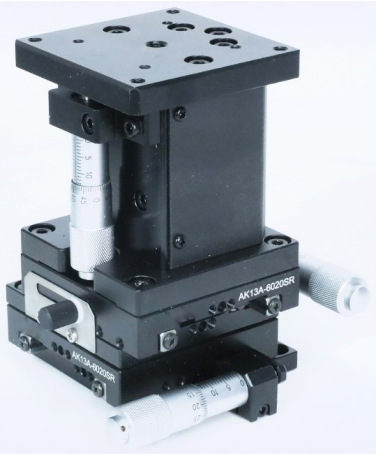
AAK Series Combined Manual Stages, 3–6 Axes, 60 × 60 mm Platform

Model AAK Series · waveqvanta.com/products/aak-series-combined-manual-stages

Combined 3- to 6-axis manual stage stacks built from AK-series linear, rotary and goniometer stages.



AAK series combined manual stages stack AK-series components into 3-, 4-, 5- and 6-axis assemblies with a 60 × 60 mm stage surface. Every version provides ±6.5 mm XYZ travel; the 4-axis adds θz rotation, the 5-axis adds a θx goniometer and the 6-axis adds a θy goniometer. Left- and right-hand drive versions are available.

Key features

- X and Y: AK13A-6020 linear stages; Z: AKV13A-60Z vertical stage, ±6.5 mm travel each
- Micrometer scale of 10 µm per division on the linear axes
- θz rotation stage (AKR10A-60): 360° coarse and 10° fine rotation, 50.4″ per division
- θx goniometer AKG75-60 (±8°) on 5- and 6-axis models; θy goniometer AKG50-60 (±10°) on 6-axis models
- Left (L) or right (R) drive location
- Aluminum alloy body with good corrosion resistance; compact structure
- Load capacity from 3 kg (3-axis) to 1.5 kg (6-axis)

Specifications

Axes	3 (XYZ), 4 (+θz), 5 (+θz θx) or 6 (+θz θx θy)
Stage Surface Size	60 × 60 mm
X / Y / Z Travel	±6.5 mm (10 µm per scale division)
θz Range (4–6 Axis)	Coarse 360°; fine 10° (50.4″ per scale division)
θx Range (5–6 Axis)	±8°
θy Range (6 Axis)	±10°
X / Y Stages	AK13A-6020SL (L versions); AK13A-6020SR (R versions)
Z Stage	AKV13A-60Z
θz Stage	AKR10A-60 (L versions); AKR10A-60R, a variant for combined stages (R versions)
θx / θy Stages	AKG75-60 / AKG50-60
Drive Location	L: left; R: right
Load Capacity	3 / 2.5 / 2 / 1.5 kg (3 / 4 / 5 / 6 axes)
Weight	1 / 1.35 / 1.7 / 2.1 kg (3 / 4 / 5 / 6 axes)
Body Material	Aluminum alloy

Model overview

Model	Axes	Drive Side	X / Y Stages	Z Stage	θz Stage	θx Stage	θy Stage	Load (kg)	Weight (kg)
AAK3-60L	XYZ	Left	AK13A-6020SL	AKV13A-60Z	–	–	–	3	1
AAK4-60L	XYZ θz	Left	AK13A-6020SL	AKV13A-60Z	AKR10A-60	–	–	2.5	1.35
AAK5-60L	XYZ θz θx	Left	AK13A-6020SL	AKV13A-60Z	AKR10A-60	AKG75-60	–	2	1.7
AAK6-60L	XYZ θz θx θy	Left	AK13A-6020SL	AKV13A-60Z	AKR10A-60	AKG75-60	AKG50-60	1.5	2.1
AAK3-60R	XYZ	Right	AK13A-6020SR	AKV13A-60Z	–	–	–	3	1
AAK4-60R	XYZ θz	Right	AK13A-6020SR	AKV13A-60Z	AKR10A-60R	–	–	2.5	1.35

Model	Axes	Drive Side	X / Y Stages	Z Stage	θz Stage	θx Stage	θy Stage	Load (kg)	Weight (kg)
AAK5-60R	XYZ θz θx	Right	AK13A-6020SR	AKV13A-60Z	AKR10A-60R	AKG75-60	–	2	1.7
AAK6-60R	XYZ θz θx θy	Right	AK13A-6020SR	AKV13A-60Z	AKR10A-60R	AKG75-60	AKG50-60	1.5	2.1

Typical applications

- Multi-axis alignment of optical components
- Fiber and beam coupling setups
- Sample positioning with tilt and rotation
- Laboratory and teaching optical setups