KUBAN hexapod

High resolution heavy payload medium size

KEY FEATURES

- Height 600 mm
- Resolution 1.5 µrad
- Repeatability ± 5 µrad
- Payload capacity up to 500 kg

APPLICATIONS

- Synchrotrons: mirror or chamber supports
- Optics

KUBAN hexapod positions a mirror inside of a vacuum chamber with high resolution. To be sure to avoid harming any part due to an unexpected over range, an inclination limit switch is installed under the hexapod mobile platform and stops the motion if the maximum roll angle is reached.

KUBAN hexapod aligns a polarimeter with high precision in a short time. This installation made by TOYAMA can be moved to be used on different beamlines at MAX IV Laboratory synchrotron.

	KUBAN
Motion and positioning	
Travel range Tx, Ty, Tz (mm)	± 25
Travel range Rx, Ry (deg)	± 5
Travel range Rz (deg)	± 10
Resolution Tx, Ty (µm)	0.2
Resolution Tz (µm)	0.1
Resolution Rx, Ry (µrad)	1.5
Resolution Rz (µrad)	2
Repeatability Tx, Ty (µm)	± 0.5
Repeatability Tz (µm)	± 0.25
Repeatability Rx, Ry (µrad)	± 2.5
Repeatability Rz (µrad)	± 4
Speed (mm/sec; deg/sec)	0.25; 0.05
Mechanical properties	
Payload capacity (kg)	500
Motor type	Stepper motor
Miscellaneous	
Operating temperature range (°C)	0 to + 50
Material	Aluminum, steel, stainless steel
Size mobile platform (mm)	Ø 450
Height in middle position (mm)	600
Mass (kg)	140
Cable length (m)	5
Options	Customized platform design Absolute encoders Adjustable height Inclination limit switch
Controller	
Controller type	ALPHA+
Interface	Ethernet
Power supply	110-240 V AC 50-60 Hz

The performances are specified for single axis motions, with all other axes at midrange and for a rotation center in the middle of the mobile platform.
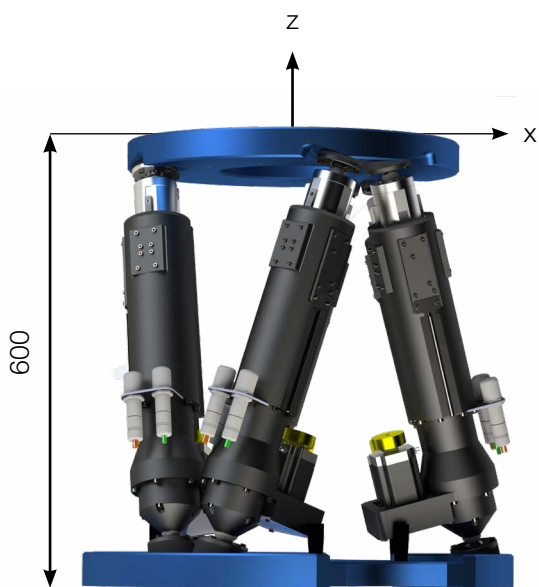
Hexapod in middle position

Ø 600

Symétrie