

PUNA hexapod

High resolution hexapod small size



KEY FEATURES

- Payload capacity up to 25 kg
- Resolution 0.5 μm
- Linear travel range ± 30 mm
- Affordable
- Resolution Tx, Ty: 0.5 μm



APPLICATIONS

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|---------------------------|-------------|------------------------|----------------|
| ■ Instrumentation | ■ Optics | ■ Testing laboratories | ■ Synchrotrons |
| ■ Aeronautics and spatial | ■ Metrology | ■ Semiconductors | ■ Automotive |



Along our standard hexapods, we also offer customized versions. They can carry heavier payloads than a standard PUNA: 35 kg at a 45° orientation, 20 kg in horizontal orientation.



An ISO5 PUNA hexapod is part of an optical qualification bench for the space cameras of the ESA PLATO mission at Liege Space Center.



	PUNA
Motion and positioning	
Travel range Tx, Ty (mm)	± 30
Travel range Tz (mm)	± 20
Travel range Rx, Ry (deg)	± 11
Travel range Rz (deg)	± 20
Resolution Tx, Ty, Tz (µm)	0.5
Resolution Rx, Ry, Rz (µrad)	5
Repeatability Tx, Ty, Tz (µm)	± 0.75
Repeatability Rx, Ry, Rz (µrad)	± 3.2
Speed Tx, Ty (mm/s)	3
Speed Tz (mm/s)	1.25
Speed Rx, Ry (deg/s)	1.25
Speed Rz (deg/s)	0.75
Mechanical properties	
Stiffness X, Y (N/µm)	1.75
Stiffness Z (N/µm)	30
Payload capacity (kg) (vertical orientation / horizontal orientation)	25 / 10
Motor type	DC motor, gearhead
Miscellaneous	
Operating temperature range (°C)	0 to + 50
Materials	Aluminum, steel, stainless steel
Size mobile platform (mm)	Ø 250
Central aperture (mm)	Ø 100
Height in middle position (mm)	200
Mass (kg)	5.6
Cable length (m)	3
Options	Clean room compatibility Heavier payload Virtual homing Hand-held control unit
Controller	
Controller type	NAOS or ALPHA+ if cable length > 20 m or temperature < 0°C
Interface	Ethernet
Power supply	110-240 VAC / 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.

