



# JORAN hexapod

High resolution ultra heavy payload large size



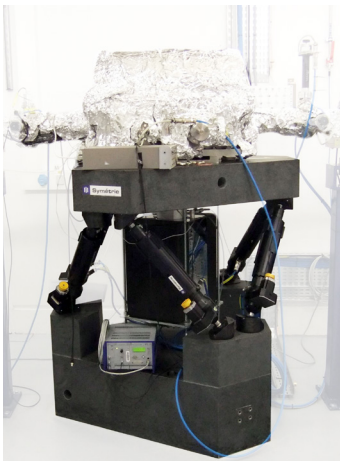
## KEY FEATURES

- High stability
- Resolution 0.5  $\mu$ rad
- Large payload capacity 1500 kg (more upon request)



## APPLICATIONS

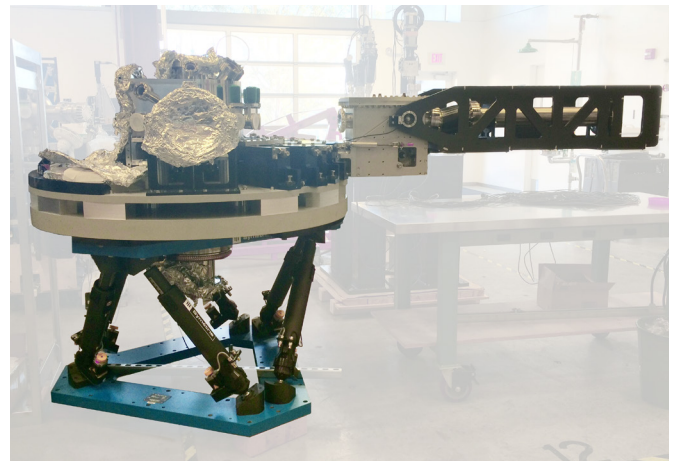
- Synchrotrons: mirror or chamber supports
- Optics



*JORAN hexapod has been developed in collaboration with ESRF synchrotron to position mirrors with very high resolution.*



*JORAN hexapod size has been adapted to the beam height of the Australian Synchrotron.*

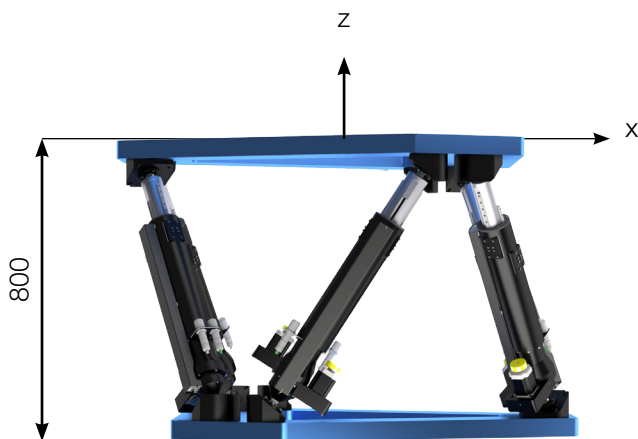


*JORAN actuators at LBL are longer to enable a  $\pm 12.5^\circ$  rotation around Z. This JORAN hexapod has also been customized to support a 3.2 tons payload.*

	JORAN ST	JORAN BL
	for lower speed	for higher speed
<b>Motion and positioning</b>		
Travel range Tx, Ty (mm)	± 65	± 65
Travel range Tz (mm)	± 50	± 50
Travel range Rx, Ry, Rz (deg)	± 3	± 3
Resolution Tx, Ty, Tz (µm)	0.1	0.1
Resolution Rx, Ry, Rz (µrad)	0.5	0.5
Repeatability Tx, Ty, Tz (µm)	± 0.25	± 0.25
Repeatability Rx, Ry, Rz (µrad)	± 1	± 1
Speed (mm/s; deg/s)	0.25; 0.05	1; 0.2
<b>Mechanical properties</b>		
Payload capacity (kg) (vertical orientation)	1500	1500
Motor type	Stepper motor	Brushless motor
<b>Miscellaneous</b>		
Operating temperature range (°C)	0 to + 50	0 to + 50
Material	Aluminum, steel, stainless steel, ceramic	Aluminum, steel, stainless steel, ceramic
Footprint (mm)	Ø 1300	Ø 1300
Height in middle position (mm)	800	800
Mass (kg)	515	515
Cable length (m)	5	5
Options	Customized platform design Absolute encoders Adjustable height Heavier payload	
<b>Controller</b>		
Controller type	ALPHA	
Interface	Ethernet, USB	
Power supply	110-240 VAC / 50-60 Hz	

Datasheet subject to change without notice. All data are superseded by any new release. R190205

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

