



SIRIUS hexapod

High resolution hexapod large size



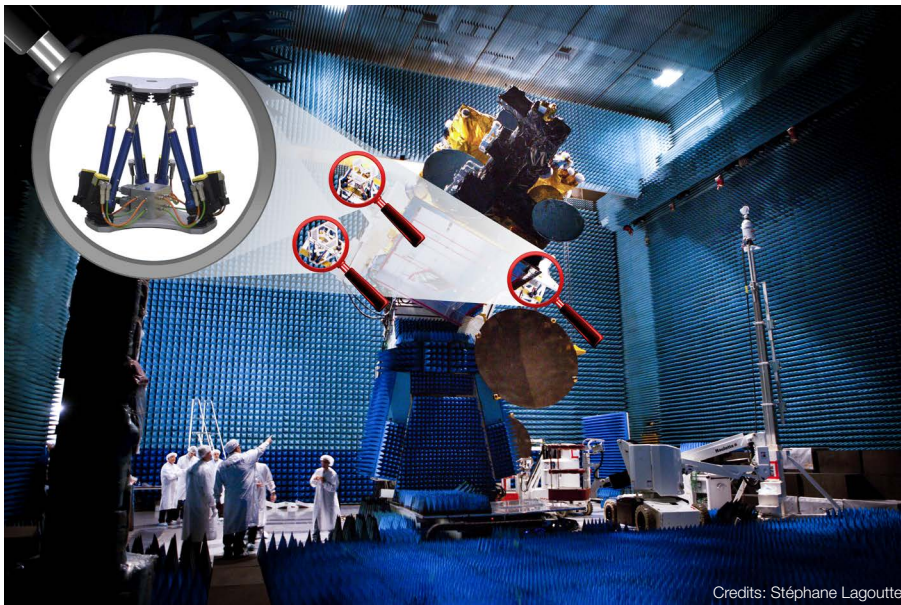
KEY FEATURES

- Payload capacity up to 200 kg
- Linear travel range ± 100 mm
- Angular travel range $\pm 16^\circ$



APPLICATIONS

- High precision positioning
- Optical adjustment
- Antenna qualification



Credits: Stéphane Lagoutte

Four SIRIUS hexapods orientate the antennas of telecommunication satellite to test their performances before the launch. Thanks to the flexibility and pivot point configuration of these hexapods, this set up is adaptable to different satellite models.



This customized hexapod with extra travel range enables the qualification of space optical instruments. Hexapod height in middle position: 1400 mm / Payload: 200 kg.

SIRIUS	
Motion and positioning	
Travel range Tx, Ty (mm)	± 150
Travel range Tz (mm)	± 100
Travel range Rx, Ry (deg)	± 16
Travel range Rz (deg)	± 20
Resolution Tx, Ty, Tz (µm)	5
Resolution Rx, Ry, Rz (µrad)	10
Repeatability Tx, Ty (µm)	± 3
Repeatability Tz (µm)	± 2
Repeatability Rx, Ry (µrad)	± 10
Repeatability Rz (µrad)	± 17.5
Speed (mm/s; deg/s)	8; 2.5
Mechanical properties	
Payload capacity (kg) (vertical orientation / horizontal orientation)	200 / 80
Motor type	Brushless motor with absolute encoder
Miscellaneous	
Operating temperature range (°C)	0 to + 50
Materials	Aluminum, steel, stainless steel
Size mobile platform (mm)	Ø 520
Height in middle position (mm)	750
Mass (kg)	82
Cable length (m)	5
Options	Clean room compatibility Customized platform design
Controller	
Controller type	VEGA
Interface	Ethernet
Power supply	110-240 VAC or 400 VAC (three-phase) / 50-60 Hz

Datasheet subject to change without notice. All data are superseded by any new release. R210817

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.

