

TRIPOD 92-6DoF

The central component of the **TRI**POD 92-6DoF is the **TRI** POD 92-Core parallel kinematic tip-tilt stage. Its design with three radially arranged towers allows a roll and pitch motion of the top plate with a total travel of 31° for Rx, 27° for Ry and a linear translation in the Z direction of 11 mm. On top of the **TRI**POD 92-Core a SR-5714C rotation stage allows a unlimited rotation around the Z axis. The **TRI**POD 92-Core is fully compatible with the CLS-92 modular system and is placed on a XY platform consisting of two CLS-92 linear translation stages. The bottom plate allows a direct mounting to a standard optical breadboard with a 25 mm grid.

Values for rotational travel are given for a pivot point at the surface of the top plate.

The overall dimensions of the complete system may be larger for different poses. For more information, see the CAD model in the download area.

The repeatability is measured about 20 mm above the top plate of each system, over the full travel range and for a single degree of freedom at a time. Values may be better for shorter travel ranges.

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The larger of the two **TRI**POD 92-6DoF motion system has six degrees of freedom and uses SMARSLIDE high-precision piezo stages, being also fully compatible with the CLS-92 modular system.

	Mechanical
Travel [mm]	63 (X); 63 (Y); 11 (Z)
Travel [°]	31 (Θx); 27 (Θy); 360 (Θz)
Max. Normal Force [N]	3.5
Max. Horizontal Force [N]	1.75
Dimensions [mm]	142 x 142
Height of Platform above Ground [mm]	94.35

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SmarAct GmbH | Schuette-Lanz-Strasse 9 | 26135 Oldenburg | Germany T: +49 441 – 800 879 0 | Email: info-de@smaract.com

Weight [g]	1430
	Closed-Loop
Sensor Types	SC
Smallest Increment [nm]	1
Smallest Increment [µ°]	3
Uni-Directional Repeatability MCS2 [nm]	+/- 50
	Options
Vacuum Options	HV (1E-6 mbar); UHV (1E-11 mbar)
Non-Magnetic Option	Yes

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