

ID-750-2P

Dual-axis high-precision rotary table

This high-precision dual-axis turntable comprises azimuth and pitch axes, as well as a hollow shaft system, and is used for testing and calibrating the angular position and rate of inertial devices and payloads.



Product Features

- Continuous, infinite rotation in all directions
- Pitch range of $\pm 90^\circ$
- Positioning accuracy to the arcsecond
- Stability to the micro-rad
- Supports ultra-low-speed control
- $\Phi 60\text{mm}$ hollow through-shaft

Suitable scenarios

Suitable for the inertial navigation industry, for the high-precision testing and calibration of laser gyroscopes, fibre-optic gyroscopes and accelerometers.

Technical Specifications

Parameter categories	Parameter items	Parameter values
Dynamic Performance	Angular position accuracy	$\pm 3''$
	Angular position repeatability	$3''$
	Speed smoothness	Positioning stability: $1 \mu\text{rad}$ (1σ)
Accuracy Performance	Maximum angular velocity	$>3^\circ/\text{s}$
	Maximum angular acceleration	$>0.1^\circ/\text{s}^2$
Range of Motion	Range of azimuth/elevation movement	Azimuth: $n \times 360^\circ$ (continuous rotation) Elevation: $\pm 90^\circ$
Mechanical Specifications	Load capacity	$>45 \text{ kg}$
	Table diameter/dimensions	750 mm
Environmental Protection	Protection rating	Ip20
	Operating temperature	0°C to $+40^\circ\text{C}$
Power and Communications	Power supply requirements	$220 \text{ V} \pm 10\%$, 50 Hz , single-phase AC
	Control interface	Ethernet bus interface (with digital I/O and analogue communication capabilities)