

PT-030-2

Dual-axis tracking turntable

This dual-axis tracking turntable comprises an inner and outer ring structure, with a turntable diameter of 450 mm and a load capacity of 30 kg. It utilises three motion modes—rate, position and yaw—to achieve high-precision dual-axis pointing and tracking of the mounted equipment.



Product Features

- Wide dual-axis range of $\pm 180^\circ/\pm 90^\circ$
- Positioning accuracy of $\pm 3''$, repeatability of $2''$
- Control resolution of 0.0001°
- Rate range of ± 0.001 to $\pm 10^\circ/\text{s}$
- Rate accuracy of up to 2×10^{-4}
- Maximum angular acceleration of $200^\circ/\text{s}^2$

Suitable scenarios

Suitable for the optoelectronic tracking industry, it is primarily used to mount equipment such as cameras, infrared thermal imagers and laser rangefinders, enabling target tracking and stable aiming.

Technical Specifications

Parameter categories	Parameter items	Parameter values
Accuracy Performance	Angular position accuracy	Inner loop, outer loop: $\pm 3''$
	Angular position repeatability	$2''$
	Tracking/pointing accuracy	$\pm 3''$
	Rate stability	2×10^{-3} (averaged over 1°) / 2×10^{-4} (averaged over 10°)
Dynamic Performance	Maximum angular velocity	$10^\circ/\text{s}$
	Maximum angular acceleration	$200^\circ/\text{s}^2$
Range of Motion	Azimuth/elevation range	Azimuth (outer loop): $\pm 90^\circ$ Elevation (inner loop): $\pm 180^\circ$
Mechanical Specifications	Load capacity	30kg
	Table diameter/dimensions	450 mm
Environmental Protection	Operating temperature	0°C to 40°C
Power and Communications	Power supply requirements	AC 220 V $\pm 10\%$, 50 Hz
	Control interface	Ethernet / Rs422