

PT-010-2

Airborne and Vehicle-Mounted Tracking Turntables

This turntable consists of a single-arm pitch axis and a rotary horizontal axis, and is directly driven by a motor. It is designed to support optical lenses and enable high-precision azimuth ($\pm 175^\circ$) and pitch ($0-80^\circ$) tracking and pointing. Accuracy performance



Product Features

- Dual-axis azimuth and elevation tracking
- Single-arm structure on the elevation axis
- Direct motor drive
- Rotational accuracy of the axis system $\leq 2''$
- Maximum load capacity for optical lenses: ≤ 10 kg
- First-order resonance frequency ≥ 75 Hz

Suitable scenarios

Suitable for the aviation and automotive industries, for optical lens tracking and stabilised pointing on airborne or vehicle-mounted platforms.

Technical Specifications

Parameter categories	Parameter items	Parameter values
Accuracy Performance	Angular Position Repeatability	$\leq 0.05^{\circ}$
	Tracking/Pointing Accuracy	$\leq 0.05^{\circ}$
Dynamic Performance	Maximum Angular Velocity	Azimuth: $\geq 45^{\circ}/s$ Elevation: $\geq 30^{\circ}/s$
	Maximum Angular Acceleration	Yaw: $\geq 100^{\circ}/s^2$ Pitch: $\geq 50^{\circ}/s^2$
Range of Motion	Azimuth/Elevation Range	Azimuth: $\pm 175^{\circ}$ Elevation: $0-80^{\circ}$
Mechanical Specifications	Load Capacity	≥ 10 kg
Environmental Protection	Protection Rating	Ip66
	Operating Temperature	-25°C to $+55^{\circ}\text{C}$
Power and Communication	Power Supply Requirements	DC $28\text{V} \pm 20\%$ or AC 24V
	Control Interface	RS422/RS485