

PT-025-2W-01

Tracking turntable

This product is a two-dimensional tracking turntable, comprising an azimuth axis and a pitch axis to form a frame-type U/T structure. Its function is to provide high-precision pointing and tracking for moving platforms such as ships; when used in conjunction with user software, it enables the tracking of low-Earth orbit satellites.



Product Features

- Dual-axis U/T frame structure
- Load capacity: 25 kg; accuracy: $\pm 10''$
- Azimuth/elevation rotation speed: $10^\circ/\text{s}$
- Dual limit protection (mechanical/electronic)
- Dual-axis angular position measurement accuracy: $\pm 5''$
- Supports low-Earth orbit satellite tracking

Suitable scenarios

Designed for the maritime communications sector, this device is used to track communications equipment on moving platforms (such as ships); when used in conjunction with user software, it enables tracking of low-Earth orbit satellites.

Technical Specifications

Parameter categories	Parameter items	Parameter values
Accuracy Performance	Angular position accuracy	$\pm 5''$ (dual-axis angular position measurement accuracy)
	Angular position repeatability	$\pm 5''$
	Tracking/pointing accuracy	Tracking error: $\pm 10''$ Static pointing accuracy: $\pm 10''$ (3σ)
	Rate stability	1% to 5%
Dynamic Performance	Maximum angular velocity	$10^\circ/\text{s}$ (azimuth/elevation)
	Maximum angular acceleration	$1^\circ/\text{s}^2$ (azimuth/elevation)
Range of Motion	Azimuth/elevation range	Azimuth: -180° to $+180^\circ$ Elevation: -10° to $+90^\circ$
Mechanical Specifications	Load capacity	25 kg (maximum)
	Table diameter/dimensions	Payload dimensions: Camera diameter 300 mm, length 600 mm (single unit)
Environmental Protection	Protection rating	Ip54
	Operating temperature	-20°C to $+55^\circ\text{C}$
Power and Communications	Power supply requirements	AC 220 V or DC 48 V
	Control interface	Ethernet/RS422 (with satellite tracking protocol)