

AR-300-2W-01

Servo turntable

This servo turntable comprises a servo control system and a dual-axis (azimuth/elevation) turntable structure. Its core function is to enable the antenna or payload to rotate continuously through 0–360° in the azimuth direction, perform circular and sector sweeps, and be adjusted in a controlled manner within a 0–90° range in the elevation direction; it is capable of high-precision pointing and roll suppression.



Product Features

- 360° omnidirectional azimuth sweep
- Controllable pitch adjustment from 0–90°
- Pointing accuracy better than 0.3°
- Azimuth sweep rate $\geq 180^\circ/\text{second}$
- Azimuth sector sweep rate $\geq 60^\circ/\text{second}$
- Angular acceleration $\geq 40^\circ/\text{second}^2$

Suitable scenarios

Suitable for use in the maritime, telecommunications and radar monitoring sectors, specifically for the stable tracking and scanning detection of shipborne antennas, optoelectronic equipment or radar systems.

Technical Specifications

Parameter categories	Parameter items	Parameter values
Accuracy Performance	Angular positioning accuracy	Better than 0.3° (including servo control to suppress roll)
	Tracking/pointing accuracy	Better than 0.3° (r.m.s.)
Dynamic Performance	Maximum angular velocity	Heading $\geq 180^\circ/\text{s}$, pitch $\geq 40^\circ/\text{s}$
	Maximum angular acceleration	Heading $\geq 40^\circ/\text{s}^2$, pitch $\geq 40^\circ/\text{s}^2$
Range of Motion	Azimuth/elevation range	Heading 0–360°, pitch 0–90°
Mechanical Specifications	Table diameter/dimensions	300 mm
Environmental Protection	Protection rating	Ip66
	Operating temperature	–25 °C to +55 °C