

AR-800-3

Three-axis antenna test turntable

This three-axis antenna test turntable comprises three axes—azimuth, pitch and elevation—and features a built-in DC–40 GHz rotary joint, enabling high-precision angular positioning and continuous rotation during antenna testing.



Product Features

- Independent control of three axes for flexible positioning
- Continuous rotation covering the full range
- Accuracy of 0.025 degrees for precise positioning
- Supports RF signal transmission from DC to 40 GHz
- Vertical load capacity of up to 2,000 kg
- Weighs just 750 kg and features a compact design

Suitable scenarios

Suitable for the aerospace and radar communications industries, it provides high-precision angular positioning and dynamic performance testing for antennas and radar systems.

Technical Specifications

Parameter categories	Parameter items	Parameter values
Accuracy Performance	Angular position accuracy	1–0.025°
	Tracking/pointing accuracy	2–0.025°
	Rate stability	3–5×10 ⁻⁴ to 5×10 ⁻³ (averaged over 10°)
Dynamic Performance	Maximum angular velocity	Elevation: 500°/min Pitch: 90°/min Depression: 450°/min
	Maximum angular acceleration	Depending on the motor configuration
Range of Motion	Range of azimuth/elevation movement	Upward azimuth: Continuous Pitch: ±95° Downward azimuth: Continuous
Mechanical Specifications	Load capacity	1–2000 kg (vertical load)
	Table diameter/dimensions	2–800 mm
Environmental Protection	Operating temperature	3–20 °C to +55 °C
Power and Communications	Power supply requirements	4–AC 220 V ±10%, 50 Hz
	Control interface	5–RS232/RS422/Ethernet