

TEST SITE HARDWARE SINGLE AXIS POSITIONER



MODEL 2006

ETS-Lindgren's Model 2006 Single Axis Positioner

is designed to provide azimuth rotation of a test object. It is intended primarily as a basic solution for azimuth (polar) pattern measurements of passive and active devices. The Model 2006 is fully compatible with our EMQuest™ & EMQuest™ Lite Antenna Pattern Measurement Software for passive antenna pattern measurement. For pattern measurement of active devices, a software upgrade to our fully-functional standard EMQuest™ EMQ-100 Antenna Pattern Measurement Software is recommended.

Positioning

The Model 2006 offers positioning resolution of 0.01°. Objects can be rotated in a continuous 360° clockwise/ counter-clockwise direction at one of eight preset speeds.

Low RF Coupling

The Model 2006 has been carefully designed from the frame up to offer minimal physical obstruction to RF fields. The motor and control unit is contained in an RF-shielded enclosure,

with the entire drive assembly fitting in a 61 cm x 61 cm (24 ft x 24 ft) square, which is compatible with the base dimensions of typical microwave absorber material. A 5.08 cm (2 in) flat filter foam absorber block covers the surface of the drive box and turntable for additional RF isolation from the Device Under Test (DUT). An expanded polystyrene foam column supports DUTs of up to 25.0 kg (55 lb).

Control

The Model 2006 is controlled directly from a computer via Ethernet connection. As the Model 2006 has fiber optic control lines, an included Ethernet to fiber converter needs to be used for connection. A simple command set is provided for development of controlling software, or the unit may be interfaced to EMQuest Software.

Indoor Use

The Model 2006 is designed for indoor use. For outdoor positioning systems, please contact ETS-Lindgren for additional information.

- 360° Azimuth Rotation
- Single Axis Precision Positioner
- Low Dielectric EUT Support Column
- Positioner Accuracy $\pm 0.03^\circ$
- Variable Speed (8 Presets Between 0.25 and 25 RPM)
- Controlled via Fiber Optic Connection
- RF Rotary Joint for Continuous Rotation
- EUT Power 115 or 230 VAC 10A Supplied via Slip Ring for Continuous Rotation
- USB 2.0 Data Connection to EUT Data/Control Interface Supplied via Slip Ring for Continuous Rotation
- Compatible with Optional EMQuest™ EMQ-100 and EMQ-100 Lite Antenna Pattern Measurement Software
- Designed for Indoor Use

Standard Configuration

- Model 2006 Turntable Assembly
- Expanded Polystyrene Column; Standard EUT Support Column Height is 87.6 cm (34.5 in) (P/N 126228; Other Heights Available)
- SMA RF Rotary Joint for Continuous Rotation, Rated at 26.5 GHz
- Ethernet to Fiber Converter (P/N 708043)
- 10m (30 ft) Fiber Optic Cable (P/N 705641-10)
- 3m (10 ft) Ethernet Cable (P/N SYS100230)
- Slip ring for EUT Power 115/230 VAC, 10 A, and for USB 2.0 Data/Control Interface
- Two-Year Warranty
- Manual

Options

- EMQuest EMQ-100 Antenna Measurement Software (Standard Version)
- EMQuest EMQ-100 Lite Antenna Pattern Measurement Software
- Additional EUT Columns, Custom Heights
- Custom EUT Mounts on Top of the EUT Support Column

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Technical Specifications

Electrical

| | |
|---------|-----------------------|
| Voltage | 208/230 VAC, 50/60 Hz |
| Phase | Single |

Physical

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| Base Height | 21.0 cm (Without Absorber), 26.4 cm (With Absorber) |
| | 8.3 in (Without Absorber), 10.4 cm (With Absorber) |
| EUT Support Column Height (P/N 126228) | 87.6 cm |
| | 34.5 in |
| Nominal Load Capacity | 25.0 kg |
| | 55.0 lb |
| Nominal Overall Height | 121.9 cm, Other Heights Available |
| | 48.0 in, Other Heights Available |