

POSITIONERS MODEL 2171B



MODEL 2171B

- Meets ANSI C63.4 Requirement for > 1 GHz Measurement
- Adjustable for 3 m, 5 m, or 10 m Test Distances
- Variable Speed with Toothed Belt Drive Provides Smooth Operation
- Fiber Optic Control Lines Eliminate RF Noise
- Accepts Stinger or Classic Antenna Mounts
- Roll-about Casters for Mobility
- Compact Size
- Designed for Indoor Use

ETS-Lindgren's Model 2171B Antenna Tower meets ANSI C63.4 requirements for measurements above 1 GHz by keeping the antenna aimed at the EUT during the antennas ascent/descent along the antenna mast. This is especially useful when high gain directional antennas like horn antennas are used. This antenna tower is also designed with a reduced size base for better maneuverability in smaller chambers.

Features

Patented Boresight System

Mounting adapter on towers normally place the antenna parallel to the ground plane. This means that as the tower raises the antenna above the EUT, measured field strength levels will be lower than actual values. This problem is solved with ETS-Lindgren's innovative boresight system which properly aims the antenna at a designed test point.

During scans, this tower maintains constant directional antenna positioning while varying the angle between the antenna and the mast. This is particularly important when using higher gain antennas of more than 3 dB. The tilting of the antenna will maintain the EUT within the half power (-3 dB) beamwidth.

Flexible Antenna Mounting

The 2171B accepts stinger or classic EMCO antenna mounts. Mounting methods maintain the antenna's centerline axis during polarization.

Fiber Optic Lines

Fiber Optic lines are used between the antenna mast and positioning controller to eliminate RF noise coupling.

Smooth Operation

A toothed belt drive provides smooth ascent and decent of the carrier assembly. The belt is an industrial grade composite that was selected for strength and longevity.

Additionally, the 2171B features variable speed operation with speed rates range from 3 cm/sec to 22 cm/sec as controlled by the EMCenter or Model 2090 Positioning Controller.

Indoor Use

The Model 2171B is designed for indoor use. For outdoor positioning systems, please contact ETS-Lindgren for additional information.

Technical Specifications

Electrical		
Voltage and Frequency	220/230 VAC, 50/60 Hz, IEC 60320 C-14	
Current Consumption	3A	
Remote Control	Fibreoptic, Duplex ST-Multimode Cable	
Drive Unit	Shielded Assembly, 20 dB below CISPR 11 Class B Limits	
Temperature Range	5 to 40° C (41 to 104° F)	
Physical		
	2.6 m (8.53 ft)	4.9 m (16.08 ft)
Nominal Height	2.6 m (8.53 ft)	4.9 m (16.08 ft)
Maximum Scan Height	2.0 m (6.6 ft)	4.0 m (13.1 ft)
Base Dimensions	1.1 m x 0.9 m (3.5 ft x 3.0 ft)	1.1 m x 0.9 m (3.5 ft x 3.0 ft)
Weight	90.0 kg (198.4 lb)	90.0 kg (198.4 lb)
Cross-Boom Loading	90.0 Nm (25.0 ft/lb)	90.0 Nm (25.0 ft/lb)
Linear Speed	3 cm/sec to 22 cm/sec	3 cm/sec to 22 cm/sec
Polarazation Velocity	3 deg/sec to 30 deg/sec	3 deg/sec to 30 deg/sec