

NSI-200V-3x3

3' x 3' (0.9 m x 0.9 m) Vertical Planar Near-field Measurement System



DESCRIPTION

The 200V-3x3 is an ideal system for measuring medium and high gain antennas (>15 dBi) with small apertures making it suitable for testing feeds and small arrays or reflector antennas. The 200V-3x3 is based on an inverted design and is constructed of modular high strength aluminum. This simple design is easy to assemble and align, accurate, and can be quickly dismantled for relocation or storage.

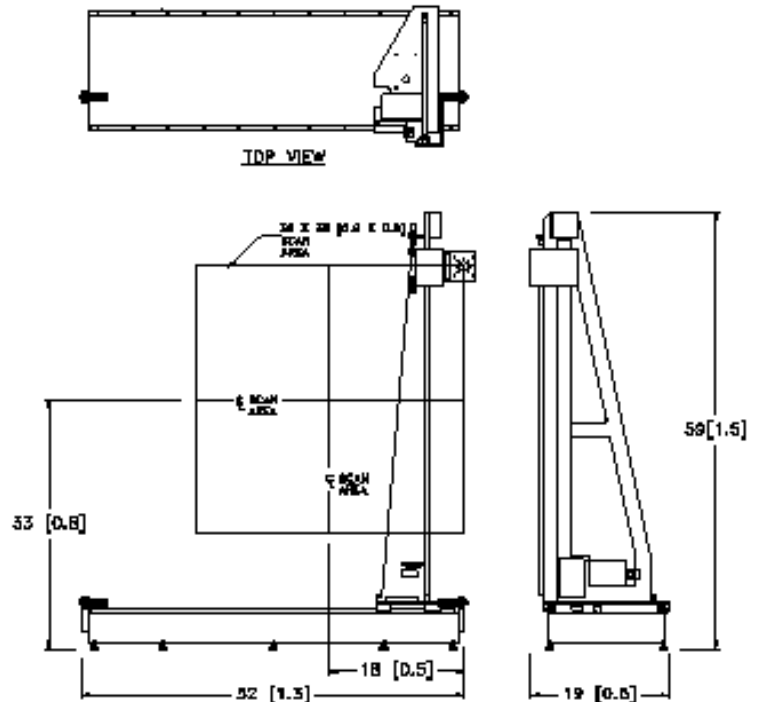
CAPABILITIES

The system interfaces with a wide variety of RF equipment and is capable of measuring amplitude and phase patterns from S-band to mmWave bands. The system includes NSI Antenna Measurement Software. The system software runs on a Windows based measurement workstation and provides automatic setup of scans based on measurement parameters and desired output. Measured data can be processed for far-field or holographic patterns yielding complete characterization of the antenna's performance. A single data set provides complete characterization of the antenna's gain, side lobes structure, beam pointing and cross polarization. The Model 200V-3x3 can be supplied with a variety of options and can be upgraded to allow for cylindrical or spherical measurements to expand system performance.

FEATURES

- Low Cost & Portable
- 3' x 3' (0.9 m x 0.9 m) Scan Area
- S-band to mmWave Band Measurements
- Inverted "T" Frame Design for High Accuracy
- Far-field, Holographic and Near-field Patterns
- Cylindrical and Spherical Options Available
- Optional support stand (shown in picture) available

SPECIFICATIONS	
Construction	Inverted 'T' Frame (aluminum)
Drive system	Precision Stepper Motor
Scan Area	3' x 3' (0.9 m x 0.9 m)
Planarity	<0.003" (0.076 mm) RMS
Corrected Planarity (Requires optional Structure Correction Software and Probe Translation Stage)	<0.001" (0.025 mm) RMS
Resolution (x,y)	0.002" (0.05 mm)
Position Repeatability	0.002" (0.05 mm) RMS
Scan Speed (X,Y)	15 in/s (0.38 m/s)
Probe Carriage Capacity	10 lb (4.5 kg) maximum recommended, WR284
System Controller	NSI controller with parallel I/O, and serial interface.
Measurement Workstation	Measurement workstation computer with large LCD monitor.
Stepper Motor Power Amplifier	EIA 19" rack mount. (7" high x 14" deep)
Motor Cables	Quick-connect; 40' (12 m)
Scanner Absorber	X-Y absorber kit (5" pyramidal cone)
Probe	Optional - See our list of standard Open Ended Waveguide (OEWG) probes
Probe Mount	Angle Bracket - allows mounting probe in "V" or "H" orientation
RF Cables	Qty. 2 - Flexible 15' (4.5 m) with SMA (m-m) coaxial connectors; DC-20 GHz
Supported RF Devices	NSI Panther Receiver Subsystem or selection of Agilent, Rohde & Schwarz and Anritsu VNA's (contact NSI for a complete list)
Power	100-240 VAC switchable; 47-63 Hz, 500 watts



DIMENSIONS

- ◆ Width - 52" (1.3 m)
- ◆ Depth - 19" (0.5 m) (excluding probe)
- ◆ Height - 59" (1.5 m)
- ◆ System Weight - 140 lb (63 kg) approx

ORDERING INFORMATION

Please contact the NSI Sales department to order this product.

Nearfield Systems, Incorporated

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