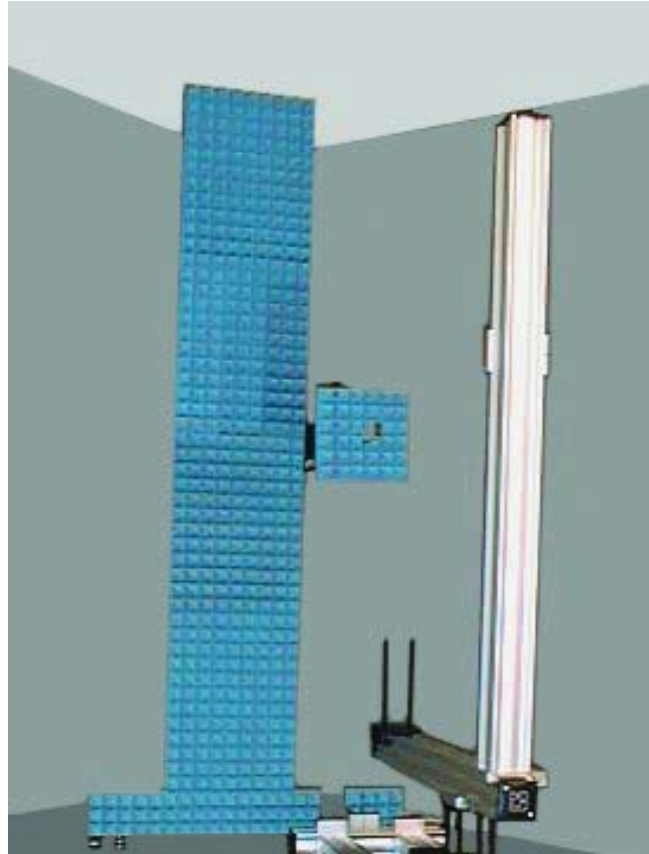


NSI-600C-5

Cylindrical Near-field System



DESCRIPTION

The 600C-5 is a complete cylindrical near-field system ideal for measuring broad beam (azimuth) antennas with apertures less than five feet making it ideal for testing stacked linear arrays. The 600C-5 consists of a vertical probe tower with an 5' (1.5 m) travel, high capacity stepper motor based azimuth positioner, control computer, software and cabling. The high capacity probe carriage can accommodate probes as low as S-band including optional roll and translation stages. This simple design is easy to assemble and align, accurate, and can be dismantled for transport or storage within one working day.

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.

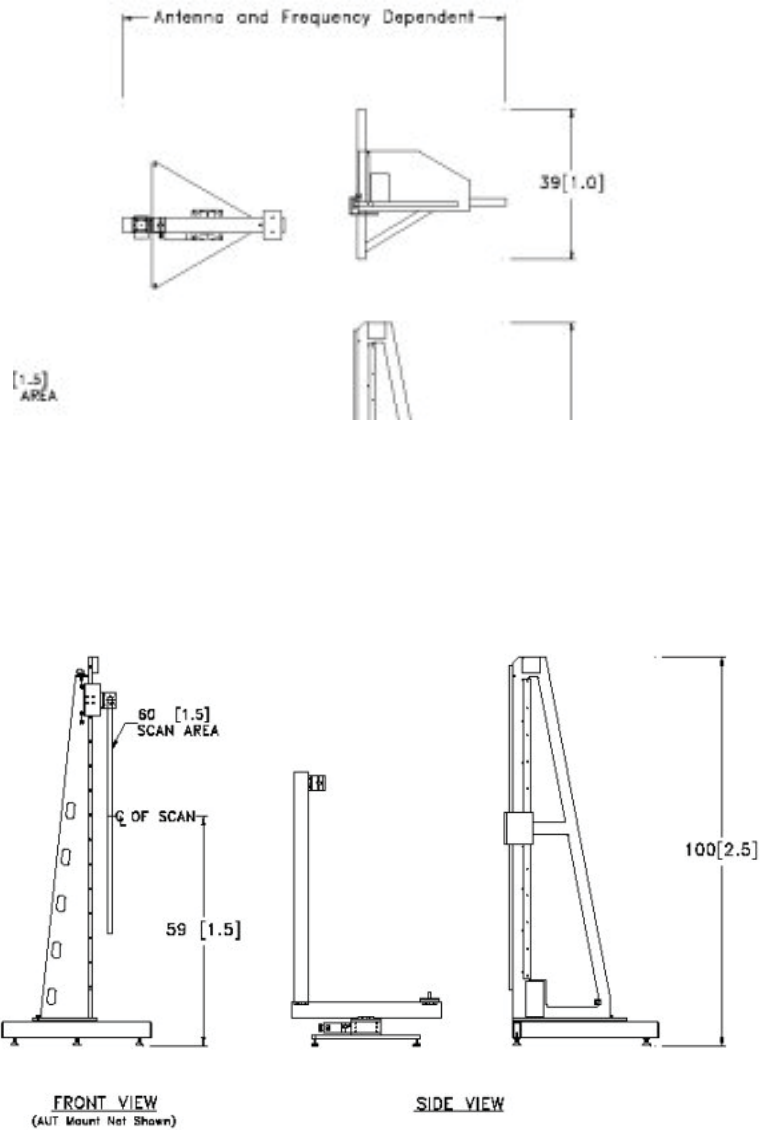
The system software runs on a Pentium based measurement controller and provides automatic setup of scans based on measurement parameters and desired output. Measured data can be processed for far-field or holographic patterns yielding complete characterization of the antenna's performance. A single data set provides information on antenna gain, side lobe structure, beam pointing and cross polarization.

The Model 600C-5 can be supplied with a variety of options to enhance system performance.

FEATURES

- Low Cost
- High Accuracy Y Linearity $<0.005''$ (0.125 mm) RMS
- 360° x 5' (1.5 m) Cylindrical Scan Area
- S to mmWave Measurements
- 1,595 lb. (725 kg) load capacity Az positioner
- Far-field, Near-field and Holographic Patterns

SPECIFICATIONS	
Construction:	Aluminum tower and base; separate azimuth stage
Drive system:	Precision Stepper Motor; Rack and
Scan Area:	360° in azimuth; 5' (1.5 m) Y
Y-axis Linearity Uncorrected:	<0.005" (0.125 mm) RMS
Resolution:	0.0125° in azimuth; 0.0025" (0.06 mm) Y
Position Repeatability:	0.03° azimuth; 0.02" (0.05 mm) (Y)
Scan Speed:	20 degrees/sec. (azimuth); 15in/s (0.38) Y
Azimuth Stage Axial Load:	1595 lbs. (725 kg) max.
Probe Carriage Capacity:	20 lbs. (9 kg) maximum recommended, WR430
System Controller:	NSI controller with serial and parallel I/O interfaces
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:	Absorber Kit (5" pyramidal cone)
Probe:	WR90 Open-ended Waveguide Probe SMA (f) transition & Pyramidal absorber (3")
Probe Absorber:	Pyramidal Cone Absorber (5")
Probe Mount:	Angle Bracket - allows mounting probe in "V" or "H" orientation
RF Cables:	Qty. 2 - Flexible 15' (4.5m) with SMA (m-m) coaxial terminations; DC-18 GHz
Rotary Joint:	Qty 1 DC-18 GHz on Az stage
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 - 39" (1.0 m)
- ◆ Depth - 39" (1.0 m)
- ◆ Height - 59" (1.5 m)
- ◆ System Weight - 350 lbs (159 kg) approx.

ORDERING INFORMATION

Please contact the NSI Sales department to order this product.

Nearfield Systems, Incorporated

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