

NSI-700S-200

Spherical Near-field Scanner for Automotive Test Applications



DESCRIPTION

The NSI model 700S-200 is an ideal system for measuring radiation characteristics of vehicle mounted antennas. The system interfaces with a wide variety of NSI, Agilent, or R&S RF equipment. The Model 700S-200 includes NSI's NSI 2000 Antenna Measurement Software. The system software runs on a Pentium 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 information on antenna gain, sidelobe structure, beam pointing and cross polarization. The Model 700S-200 can be supplied with a variety of options to enhance system performance.

CAPABILITIES

The 700S-200 consists of a 6.5m (21.3 ft) diameter vehicle turntable and an overhead gantry with scanning radius of 12.5m (41 ft). The rotator can support loads up to 4,500 kg (10,000 lb) and can operate at speeds up to 12 degs/sec. The gantry is a dielectric design to minimize reflections, and is capable of speeds up to 0.5 deg/sec over its travel range of 0 to 90 degrees. At 90 degrees, the gantry is recessed completely below ground level, allowing the turntable to be used for far-field measurements.

FEATURES

- Radiation pattern testing of vehicle mounted antennas
- Dielectric gantry
- In-ground turntable
- Field Probe
- Automatic Electronic Alignment Capability
- RF sub-system
- Acquisition software
- Optional radome
- Optional far-field tower

SPECIFICATIONS	
TURNTABLE	Diameter of 6.5m (21.3 ft)
	4,500kg (10,000 lb) load capability
	RF rotary joint & slip ring assembly
	Position accuracy of $\pm 0.1^\circ$
	Angular velocity of up to $12^\circ/\text{s}$ (2rpm)
GANTRY	Probe scanning radius of 12.5m (41.ft)
	Angular velocity of $0.5^\circ/\text{sec}$
	Angular positioning accuracy of 0.1°
	Angular range from 0° to 90°
	Gantry recesses into the ground at 90° .
NSI2000 SOFTWARE	Near-field & Far-field acquisition capability
	Multi-frequency capability
	Hemispherical truncation options
	Radome reflection suppressions techniques
	Supports all standard NSI instrument drivers

DIMENSIONS



Gantry shown in close to vertical orientation



Gantry undergoing factory testing



Far field tower installation



NSI rotator undergoing factory testing

ORDERING INFORMATION

Please contact the NSI Sales department to order this product.

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