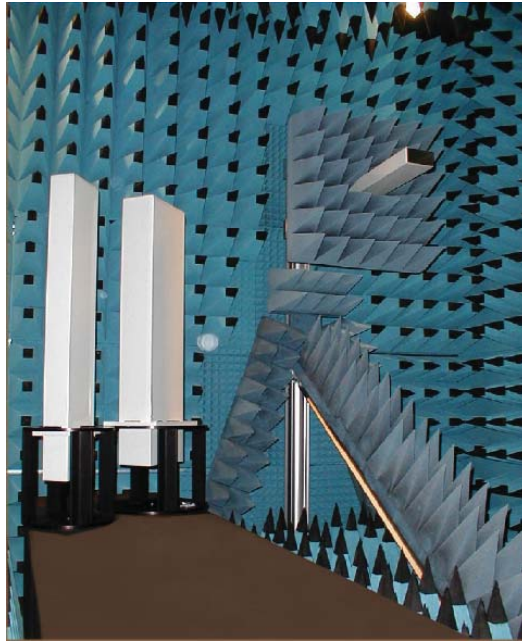


### Dual Axis Phi/Theta Far-field Measurement System



#### DESCRIPTION

The NSI-800F-30 Dual axis Phi/Theta Far-field Measurement System is a cost effective solution that will allow the end user to eventually convert his far-field measurement system into a near-field measurement system. This system takes advantage of all the upgrade options recommended for the NSI-800F-10 single axis far-field measurement system to convert it into a complete dual-axis phi-over-theta, high accuracy stepper motor based positioning system. Beyond this, the NSI-800F-30 can easily be converted into an NSI-700S-30 Spherical Measurement System with the addition of NSI's Near-field software.

As with all NSI systems, this system is constructed of modular high strength aluminum and can support loads of up to 40 pounds (18 kg). The location of the probe, theta and phi stages are fully adjustable to accommodate different antenna sizes and mounts. This simple modular design is easy to assemble and can be quickly dismantled for transport or storage.

#### SYSTEM CAPABILITIES

The system interfaces with a wide variety of RF equipment and is capable of measuring amplitude and phase patterns from L-band to mmWave Bands. The Model 800F-30 includes NSI Far-field Antenna Measurement Software.

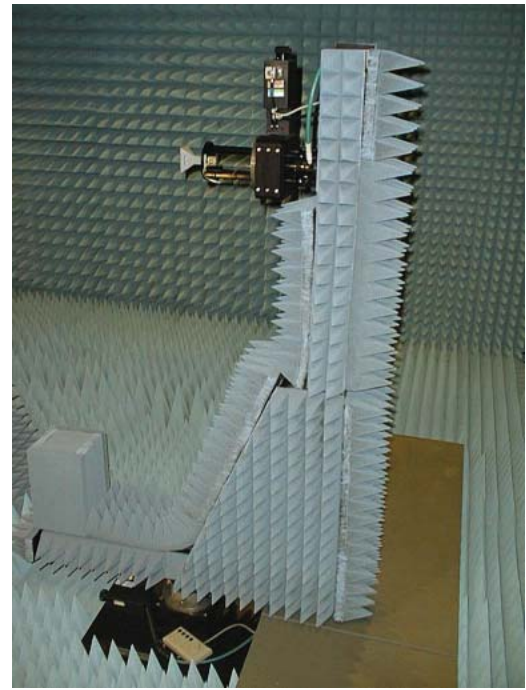
The system software runs on a Pentium based measurement workstation and provides automatic measurement parameter setup. Measured data can be displayed to provide complete characterization of the antenna's performance. A single data set provides information on antenna gain, side lobe structure, beam pointing and cross polarization.

The NSI-800F-30 can further be supplied with a variety of options to enhance system performance.

#### FEATURES

- Low Cost & Portable
- Full 360° Scan Area
- L-band to mmWave Measurements
- Far-field, Holographic and Near-field Patterns
- Near-field Measurement Options Available

SPECIFICATIONS	
Construction	Theta, phi, and pol rotation stages with "L" bracket (aluminum)
Drive System	Precision Stepper Motors
Scan Area	Full spherical; Phi/Theta - 360°
Maximum Antenna Load	40 lb (18 kg) at 9" CG offset
Resolution	0.0125° phi and theta
Position Repeatability	0.03°
Rotational Speed (Theta and Phi)	20°/s
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")
RF Cables	20 GHz RF Cables
Rotary Joints	Qty. 3 - DC-26.5 GHz, (Phi, Theta, Pol)
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, 50/60 Hz, 500 watts



NSI-800F-30

## DIMENSIONS

- ◆ Width - 40" (1.0 m)
- ◆ Depth - variable
- ◆ Height - 78" (2.0 m)
- ◆ Weight - 250 lb (113 kg) approx

## ORDERING INFORMATION

Please contact the NSI Sales department to order this product.

### Nearfield Systems, Incorporated

19730 Magellan Drive, Torrance, CA 90502, USA, Tel: 310.525.7000, Fax: 310.525.7100  
 Email: [sales@nearfield.com](mailto:sales@nearfield.com). Visit our website: [www.nearfield.com](http://www.nearfield.com)