FEATURES

- Integrated planar, cylindrical, spherical near-field and far-field
- Instrument drivers for NSI-MI and vendors' RF equipment
- Instrument drivers for NSI-MI and other vendors' positioning equipment
- Auto-dwell setting for RF synthesizer switching times
- Variety of plotting formats - cuts, contour plots, 3D polar plots, listings
- Automated pattern analysis features
- Expert system aiding test setup
- Automated system health checks
- User definable startup configurations
- User definable macro buttons
- Drag & drop plot overlays
- Drag & drop scripting automation
- Holographic diagnostic imaging
- Professional Edition for full automated scripting of all NSI2000 features

DESCRIPTION

The NSI2000 software represents a combination of experience and technology that stands ready to solve the toughest antenna measurement challenges. NSI2000 is a 32-bit multi-tasking Windows® application that provides an excellent array of features taking advantage of the recent advances in operating system technologies. NSI2000 includes a 3-D viewer to inspect near-field and far-field data in a 3-D dynamic mode. This package spans all four measurement domains and presents the user with a uniform interface. NSI2000 also controls acquisition and interfaces to all mechanical and RF hardware required to make a measurement.
MEASUREMENTS
• Manual and automatic scan set-up
• Continuous or stop motion scans
• Bidirectional scans
• Automatic scan speed optimization
• Automated dwell time optimization
• Manual axis motion control
• Drift Check

PROCESSING
• Near-Field to Far-Field transforms:
  ◦ Planar
  ◦ Cylindrical
  ◦ Spherical
• Transformed coordinate systems:
  ◦ K-space (Planar only)
  ◦ Az-over-El
  ◦ El-over-Az
  ◦ Theta-phi and many others
• Linear and Circular polarization
• Power and axial ratio

• RF Time stability plot
• Multibeam state setup
• Multifrequency measurements multi-axis control
• Real-time display (amplitude and phase)
• Live Signal to Noise Ratio display

• Probe position compensation
• K-Correction (Planar only)
• Available polarization definitions for planar SW:
  ◦ Ludwig-3 (Eh, Ev)
  ◦ Ludwig-2 (Eaz/Eel)
  ◦ Ludwig-2 (Eel/Eaz)
  ◦ Ludwig-2 (Eѳ/Eѳ)
• Near-Field Probe Correction
• Aperture truncation and tapering
• Probe network correction

PLOTTING
• Antenna patterns of: Amplitude, Phase, Co-Pol and Cross-pol, Axial Ratio
• Linear and polar patterns
• 2D pattern plots
• Drag and drop Overlay and plot subtraction

• Contours
• Color Images
• Back Projection
• 3D display
• Data Listings

ANALYSIS
• Gain
• Directivity

• Beamwidth
• Side lobe level analysis

ADVANCED FEATURES
• Antenna Beam steering control
• Unit conversion toggle (SI, Imperial, Wavelength)
• Bidirectional scan with triggering compensation
• Pin switch control (up to 256 ports)
• ASCII file export

• Multi-beam plotting capability
• Beam table Excel import/export
• Scan recovery
• RF stability plot analysis
• Extensive documentation
• Marker mode
COMATIBILITY
• Windows® 10

STANDARD COMPONENTS
• NSI2000 Standard Edition
• Software manual
• Software User License

OPTIONAL SOFTWARE COMPONENTS
• Motion Tracking Interferometer (MTI)
• NSI2000 Professional Edition