DAMS Antenna Measurement System
Features and Specifications

DAMS 6250
DC to 18 GHz Frequency Range
Wide Frequency Ranges
Capable of measuring frequencies ranging from DC to 18 GHz.

Dual-Axis Movement
360° azimuth range with up to ± 90° of elevation tilt.

High Resolution
Capable of 0.01° steps azimuth and 0.01° steps elevation.

Weight Capacity
Able to carry payloads of up to 250 lbs.

Precision Rotary Joint
The rotary joint is constructed from a special carbon based material that allows noiseless measurements up to 40 GHz.

Deluxe Measurement Software
All systems come complete with DAMS Measurement Studio Pro which features various special plots and functions.

Spherical Plot Module
Map measured antenna data over a sphere or an ideal isotropic sphere.

Complete Warranty
Our 3-year warranty covers all parts, labor and technical support.

Included RF Cables
All systems include two 10’ calibrated precision ultra low-loss SMA measurement cables.

Includes All Accessories
This is the complete measurement solution and includes everything besides the VNA and computer.

Precision Drive Train
Steel gear and worm, with ball and tapered roller bearings for high torque and smooth motion.

Advanced Measurement Calculator
Takes the hassle out of performing detailed and complex computations.
Positioner Specifications

Platform Operating Specifications

Frequency Ranges: DC to 18 GHz

Platform Movement: Horizontal 1.8 degree precision stepper motor with low-noise belts
Up to 0.01° azimuth resolution
360° continuous azimuth range
± 90° elevation range at 0.1° per step

Drivetrain: Heavy-duty steel gear drive-train
Steel gear and worm, with ball and tapered roller bearings

Positioner Feedback: Precision potentiometer

Platform Max Speed: 30 R.P.M. azimuth
120° per minute elevation

Platform Mounting: 30” aluminum or acrylic AUT thrust plate with 250-lb. payload capacity
Ultra heavy-duty tripod

Weight Capacity: 250 lbs. maximum payload at level position (capacity decreases with angle)

Cable Interface: Ultra high-quality cable with SMA connectors
Ultra-precision, low-noise rotary joint with SMA connectors

Included Options: Digital level for precise setup
Positioning laser for long range alignment
DAMS Software Studio Pro
Advanced processing module
3-year warranty on parts and labor
Technical support

Controller Operating Specifications

Control Methods: DAMS Antenna Measurement Software (or any software with serial communication, which requires Platform Development Kit)

Interface: USB/RS-232 serial/ethernet

Power Requirements: +48 vDC (6.0A)

Analyzer Interface: GPIB controller card (not included)
Physical Properties

Positioner Dimensions: 17 inches (30.5 cm) wide
12 inches (12.5 cm) deep
17 inches (35.6 cm) tall

Height: 5” (12.5 cm) without vertical movement assembly or tripod
35” (35.6 cm) minimum with vertical movement assembly and tripod
72” (182.88 cm) maximum

Weight: 120 lbs. (positioner only)
35 lbs. (tripod only)
155 lbs. (combined weights)

Positioner Composition: Aluminum 80%
Stainless steel 15%
Misc. plastics/metals 5%

Tripod Composition: Aluminum and plastic

Environmental Specifications

Operating Temp: 0° C to 45° C (32° F to 104° F) (with no condensation)

Transport Temp: -40° C to 60° C (-40° F to 140° F) (no condensation within 72 hours)
Overview of Software Features

**Multi-Trace Plots (Polar/Amplitude)**
- Compare multiple antennas
- Dual marker function
- Selectable linear or log (dB)
- Instant delta dB/angle marker readout
- Selectable scale
- Export option

**3D and Spherical Plots**
- Full 3D interface
- Map data onto a sphere
- Plot data at any frequency
- Multiple overlay and display features
- Support for power meters, voltmeters, spectrum analyzers and VNA/PNA's
- Continuous rotation or swept measurements
- Export data with variable formatting
- Measure up to 1600 frequency points per increment
- Variable speed
- Move to max signal position
- Vertical/horizontal scan measurements
- CW/CCW antenna rotation

**Other Features**
- Calibrated horn table import
- Path loss calculator
- Complete data manipulation
- Multiple storage registers for convenience
- Link commander (link simulator)
- Complex data calculator

**Optional Extras**
- Antenna Network & Measurement Simulator