

# MI-3622 Far-Field System - Dual-Axis / Spectrum Analyzer

## Key Features & Benefits

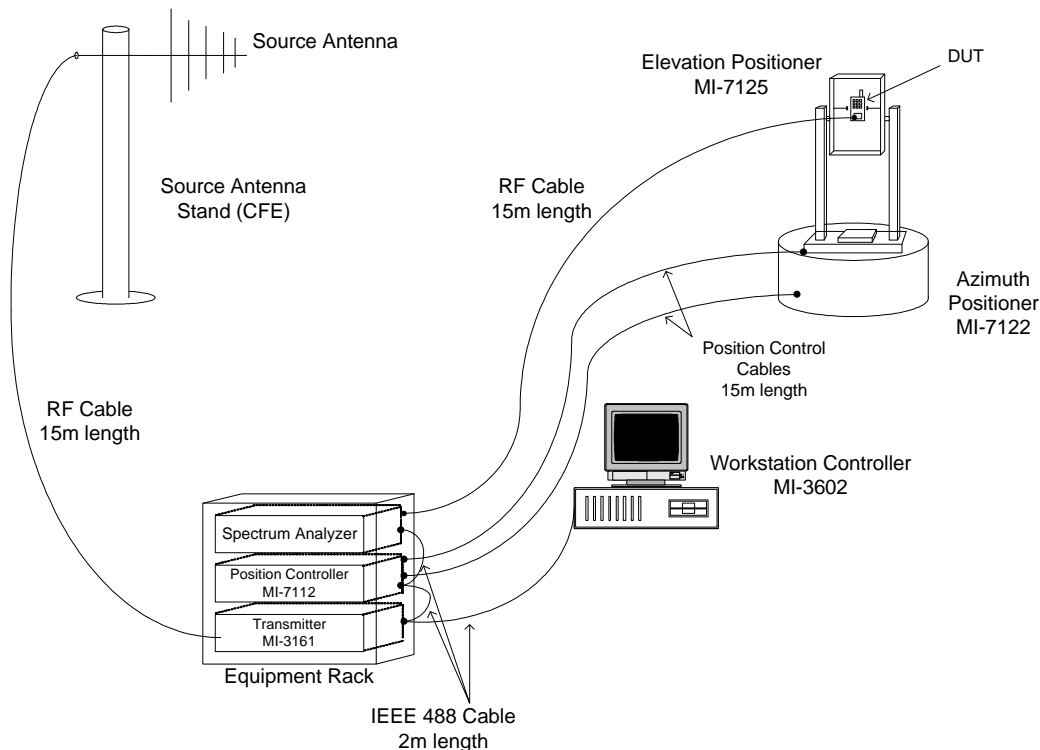
- Rapid, accurate measurements over any two bands within 500 MHz to 2.5 GHz frequency range provide flexibility and wide coverage.
- Spectrum analyzer receiver provides superior RF selectivity.
- Extensive analysis software is built-in to simplify pattern evaluation.
- Network connection provides means to easily download data for offline analysis.

### Two Bands within 500 MHz to 2.5 GHz

- Automated dual-axis pattern measurements offer maximum flexibility and control with an advanced yet economical DUT positioner.
- Dielectric elevation positioner produces low perturbations to the measurements.
- Pattern plotting in polar or rectangular format for single or multiple patterns offers the ultimate in flexible data presentation.

## Description

The MI-3622 is a mid-range, dual-axis far-field measurement system in the MI-3600 family designed for the Wireless market. Assembled to meet the needs of the most demanding test and measurement environments, the MI-3622 is a complete instrumentation system consisting of a workstation computer and software, dual-axis positioner with combined azimuth and elevation angle control for rotating the Device-Under-Test (DUT), position controller, receiver, transmitter, and broadband linearly polarized log periodic source antenna. The distinguishing elements of the MI-3612 are the spectrum analyzer receiver, narrow band synthesizer transmitter, and dual-axis DUT positioner. The system provides superior ease of use that includes setup, test parameter provisioning, data acquisition, and data analysis. Using the workstation controller, an operator can select the frequency from one of two narrow band synthesized signal sources and record the received signal from the broadband, highly accurate spectrum analyzer receiver. Various options include standard gain antennas for calibration, masts for source antenna and DUT positioner, longer signal and control cables and absorber.



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## **MI-3622 Specifications**

### **System Workstation:**

- MI-3602 software and computer with monitor, keyboard, mouse, color printer, ethernet card, IEEE card
- Antenna measurement, analysis, and plotting software
  - ▲ Automatic calculation of beam width, beam peak, location and depth of nulls, location and level of side-lobes, and gain
  - ▲ Polar or rectangular format plots

### **Signal Source:**

- MI-3161 Narrow Band Synthesizer
  - ▲ Two bands may be selected from the following: 500 to 800 MHz; 800 to 1,200 MHz; 1,000 to 1,500 MHz; 1,500 to 2,000 MHz; and 2,000 to 2,500 MHz
- Power: 10 dBm max

### **Receiver:**

- Spectrum Analyzer
- 3 dB resolution bandwidth
- Dynamic range: 110 dB (narrowband)
- Input power: -10 dBm max

### **Positioner:**

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| <ul style="list-style-type: none"><li>➤ MI-7122 Azimuth Positioner<ul style="list-style-type: none"><li>▲ Diameter: 0.8 meter (31.5 inches)</li><li>▲ Vertical load handling: 75 kg (165 lbs)</li><li>▲ Speed: 0.3 to 3 rpm</li><li>▲ Rotation: <math>\pm 200</math> degrees</li><li>▲ Angular accuracy: 0.5 degrees</li></ul></li></ul> | <ul style="list-style-type: none"><li>➤ MI-7125 Elevation Positioner<ul style="list-style-type: none"><li>▲ Total height: 1.8 meters (71 inches)</li><li>▲ Max. load: 10 kg (22 lbs)</li><li>▲ Material: PVC, weatherproof</li><li>▲ Positioning accuracy: <math>\pm 1</math> degree</li><li>▲ Rotation angle: 360 degrees</li></ul></li></ul> |
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### **Position Controller:**

- MI-7112 provides two axes of control
- IEEE 488 based

### **Source Antenna:**

- Linearly polarized, log periodic

### **Cables:**

- Cables are provided to support equipment separation up to 15 meters.

### **Options:**

- Standard gain antennas are available.
- Contact factory for alternate configurations.