

MI-2097 Automated Microwave Measurement System

Key Features & Benefits

- Measures up to 10,000 phase and amplitude data points per second with 90 dB of dynamic range to reduce test times and improve productivity.
- Supports automated multi-frequency measurements. Up to 1,024 different frequencies can be acquired at each measurement interval with frequency changes accomplished at up to 5,000 phase locked stops per second.
- Tests complex multi-port antennas quickly and accurately by using up to 16 ports in various combinations for receive and transmit lines.



MI-2097 AMMS

Description

MI Technologies' MI-2097 Automated Microwave Measurement Systems offer an extensive array of features and options that provide solutions for the most demanding measurement requirements.

The MI-2097 allows users to fully automate the antenna measurement process, from setup to analysis and reports.

From production testing to engineering design, the MI-2097 AMMS provides the results-oriented test and measurement solutions needed to test the products we use today and those we are designing for tomorrow.

The MI-2097 system can be configured to suit the needs of the most demanding application.

Operating on Microsoft Windows® platforms, the MI-2097 includes a computer workstation that insures compatibility with a variety of third-party devices.

The MI-2097 can be reconfigured to operate in numerous alternative measurement setups.

MI-2097 measurement system configurations are built upon standard MI Technologies' products. These power building blocks include:

- MI-3001 Data Acquisition and Analysis Workstation with high speed Data Acquisition Coprocessor (DAC)
- MI-3100 Signal Source
- MI-1797 Microwave Receiver System
- MI-4190 Position Controller

These components provide the integrated functionality that enables the MI-2097 to collect up to 10,000 measurements per second with a single sample dynamic range of 90dB.

Each of these components has been designed to provide the highest level of integrated system functionality.



1-800-854-3660

www.mi-technologies.com

Product Specifications

Frequency Range:	2 GHz to 20 GHz Basic 0.1 GHz to 140 GHz with Options *	
Dynamic Range: (Receiver Subsystem Typical Values)	85 dB 0.1 to 3 GHz Single Sample 90 dB 3 to 20 GHz Single Sample To 110dB or better, .1 to 18 GHz With Averaging	
Receiver Sensitivity CW: (Single Sample)	-105 dBm, 0.1 to 3 GHz -110 dBm, 3 to 18 GHz -100 dBm, 18 to 26.5 GHz	
Averaging Factor:	1 to 2048	
Full Scale RF Input Power:	-20 dBm	
Reference to Signal Isolation:	110 dB	
Channel to Channel Isolation:	100 dB	
Number of Channels:	Signal & Reference Standard (Options for up to 16)	
Remote Mixer Cable Length:	20 Ft. Standard, Options to 80 feet.	
Accuracy:	Amplitude	0.05dB/10dB
	Phase	0.4 Deg/10dB
Resolution:	Amplitude	0.001dB
	Phase	0.01Deg
Frequency Resolution:	0.1 Hz – 8 Hz depending on selected option and frequency	
Measurement Speed:	100 μ sec per channel, CW	
Frequency Switching Speed*	200 μ sec - 2 msec depending upon source selection	
Maximum Number of Frequencies:	1024	
Frequency Modes:	CW or Pulsed	
Pulsed Measurement Speed:	10,000 Measurements per Second	
Pulse Width Resolution:	33 nsec	
Triggers:	GPIB, External TTL, High Speed Parallel Interface	
Position Record Increments:	User Selectable	
Total Intervals:	User Selectable	
Positioning Axes:	4 Axes standard, Up to 16 with options	
Position Controller Expansion:	Up to 2 Additional Position Controllers	
Workstation Platform:	Pentium Based Computer Windows® Operating System GPIB Internal Control Interface High Speed Parallel Internal Data Transfer Ethernet External Interface 19" LCD Display Large Format (11" X 17") Color Printer	

Specifications subject to change without notice.

*The export of the equipment or components thereof, described herein, or export of the technical data associated with such items, may require the advance approval of the U.S. Government.

