HAND-HELD POWER METER

Perform 100 kHz to 2.6 GHz CW power measurements over an 80 dB dynamic range while a built-in calibrator automatically performs background calibration.

Overview:

Micronetics' Hand-Held Power Meter combines a power meter and frequency counter with lab grade accuracy in a portable package.

Perform 100 kHz to 2.6 GHz CW power measurements over an 80 dB dynamic range while a built-in calibrator automatically performs background calibration. And the meter also includes a 100 kHz to 2.6 GHz frequency counter.

The sensor module is in the meter, and it can be replaced in a lab or in the field in less than a minute. Measurement data can be downloaded to a PC using the RS 232 serial interface.

The light weight, compact size and battery life of up to 8-hours makes Micronetics Hand-Held Power Meter ideal for field test as well as bench top use.

FEATURES AND OPTIONS:

FEATURES:

¨ CW power measurements over an 80 dB dynamic range, from -60 to +20 dBm
¨ 0.25 dB instrumentation plus calibration accuracy
¨ 100 kHz calibrator automatically performs background calibration
¨ 100 kHz to 2.6 GHz frequency counter with 0 dBm sensitivity, -5 dBm typical
¨ Reference oscillator stability is +2.5 ppm, 0 to 55° C, 1 ppm per year standard
¨ High stability oscillator option of 1.0 ppm, 0 to 55° C, 1.0 ppm per year
¨ Weighs less than 2 pounds
¨ Measures 3.75" (W) x 8.50" (H) x 1.75" (D)
¨ Battery life of up to 8-hours

ACCESSORIES AND OPTIONS:

¨ RS-232 Cable
¨ Soft Carrying Case
¨ NiMh Battery Pack
¨ High Stability Time Base
¨ AA Battery Holder
¨ Spare RF Front End Module
¨ RF Calibration Cable
¨ AC Charger and Power Cable

Specifications:

POWER METER

Frequency Range	100 kHz to 2.6 GHz
Power Range	-60 to +20 dBm
Display Resolution	
	Selectable log mode 1, 0.1, 0.01, 0.001 dB
	Selectable lin mode 2, 3, 4, or 5 significant digits

ACCURACY

System linearity	±0.04 dB over a 70 dB range
Calibration factor uncertainty	±3.5% for all frequencies
Sensor Module VSWR	<1.2:1
Zero Set (digital set zero)	50 pw
Noise	<200 pw
Zero drift	<±200 pW during 20 minutes
Temp. coefficient of linearity	0.3%/°C
Calibrator frequency	100 kHz, nominal
Calibrator 0.0 dBm uncertainty	1.2%
Sensor	(RF module)
Calibration	automatic, background
RF module	customer replaceable
Damage leve	+23 dBm

FREQUENCY COUNTER

Frequency Range	100 kHz to 2.6 GHz (3 auto ranges)
	100 kHz to 70 MHz, low range, typical
	50 MHz to 560 MHz, mid range, typical
	450 MHz to 2.6 GHz, high range, typical
Display Resolution	1 Hz, low; 10 Hz, mid; 100 Hz, high; 1 sec gate
Measurement Res.	1 Hz, low; 8 Hz, mid; 32 Hz, high; 1 sec gateInput Range 0 dBm, (-5 dBm typical) to +20 dBm
Damage Level	+23 dBm
Timebase Stability	
	Standard
	Temperature: ±2.5 ppm, 0 to 55°C
	Aging: ±1 ppm per year
	High Stability Option
	Temperature: ±1.0 ppm, 0 to 55°C
	Aging: ±1 ppm per year
Accuracy ±1 LSB ± timebase frequency	

GENERAL SPECIFICATIONS

Approvals CE mark	
Temperature range	
	Operating: 0 to 55°C (+32 to 131°F)
	Storage: -40 to 70°C (-40 to 158°F) (excluding batteries)
Remote Interface RS 232	
Battery life 8 hours, typical, power mode	
	8 hours, typical, low frequency
	4 hours, typical, mid frequency
	3-1/2 hours, typical, high frequency
	Type NiMH

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TEST SOLUTIONS