

20 - 1000 MHz

MODEL 44A, AP BROADBAND RF WATTMETER

FEATURES

- REQUIRES NO ELEMENTS OR "SLUGS"
- NO BAND SWITCHING
- MEASURES 1 TO 500 WATTS
- 5 POWER RANGES
- 5 WATT FULL SCALE RANGE
- COVERS 20 - 1000 MHz
- MEASURES FORWARD AND REFLECTED POWER
- -40 dB RF SAMPLING PORT
- SHOCK-MOUNTED METER
- LOW TEMPERATURE OPERATION
- QUICK-CHANGE CONNECTORS
- LIGHT WEIGHT: 3 LBS

The Telewave **Model 44A/AP** RF Wattmeter is a compact, versatile instrument used for direct measurement of forward and reflected RF power in a coaxial transmission line under any load conditions. Wide band capability and dynamic range allows operation without elements, inserts, or bandswitching.

The 20 microamp taut-band meter movement is shock mounted in a rugged, diecast housing, making this instrument ideal for mobile radio installation in aircraft or vehicles, as well as base stations.

Model 44AP includes an RF sampling port, with an output 40 dB below the total transmission line level, for frequency measurement, signal injection, or spectral analysis.



BACK



CARRY CASE (OPTIONAL)



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All specifications subject
to change without notice
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MODEL 44A, AP

This wide-band instrument covers 20 to 1000 MHz with a power range of 1 to 500 watts. The meter movement can be turned off for rough handling when not in use. A leather carrying strap is provided to facilitate portability. The use of a taut-band meter movement allows operation in cold temperatures.

The RF sample port on Model 44AP samples a low level of RF power as it passes through the instrument. This bi-directional port is accessed via a BNC connector located on the side of the meter. It allows injection of a signal into the device under test, or can be used for spectrum analysis and frequency measurements without affecting operation of the meter.

The Model 44A/AP utilizes a set of precision directional detectors which sample forward and reverse CW power flow in a specially engineered section of transmission line. The sampled current is scaled to drive the 20 μ A taut band meter. Forward and reflected power can be directly measured by rotating the FWD-REV switch. VSWR (Voltage Standing Wave Ratio) is easily determined by comparing these measurements and using the convenient chart on the back of the instrument.

Five power scales are provided. The 500 watt scale will test most high powered transmitters, while the 5 watt scale makes it simple to

tune low powered portables. The excellent stability of this unit and the ability to switch it from one power range to another to check the calibration eliminates the need for a secondary standard to verify calibration.

SPECIFICATIONS	
Frequency range	20-1000 MHz
Full scale power ranges	5, 15, 50, 150 and 500 watts
Impedance, primary line	50 ohms nominal
VSWR (max)	1.1:1
RF sampling port (44AP)	-40 dB +/-2 dB below total power (forward + reverse)
Connectors (input/output) (Quick-Change standard)	N-Female standard UHF, DIN, TNC, BNC optional
Sample port	BNC-female
Dimensions (HWD)	in. 6.625 x 4 x 3.25 mm 168.3 x 101.6 x 82.6
Weight lbs (kg)	3 (1.36)

METER ACCURACY

+/-6% with correction	+/-5%	Type N connectors +/-6% (UHF connectors not specified)
20 MHz	150 MHz	512 MHz
		1000 MHz