



Antenna Tester

AT-500



The **RF** Experts

Bird's® AT-500 Antenna Tester provides a cost-effective, fast, graphical way of determining the quality of mobile and base station antennas.

- Rugged, easy-to-use, hand-held design with extended battery life makes it ideal for use in the field.
- Tests the system in VSWR, Return Loss, Match Efficiency, or Reflection Coefficient (Rho)
- Single frequency readings and frequency sweeps allow for everything from pin point tests to system optimization and tuning.
- Can save up to 12 traces for comparison and tracking over time.
- RS232 Interface allows communication.

PROBLEMS/SOLUTIONS

Harsh environment

- Military grade instrument

Extended field use

- Long battery life

Antenna failure

- Multiple measures to identify failure mode

APPLICATION

Ideal for use when a rugged field instrument is required to validate, test and troubleshoot antenna systems.

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FREQUENCY CHARACTERISTICS

Frequency Range	5-520 MHz
Frequency Resolution	20 kHz
Frequency Accuracy	±50 kHz
Number of points	100

MEASUREMENTS

Rho	0.000 to 1.000
Match Efficiency	0 to 100%
Return Loss	-32 to 0 dB
VSWR	1.00 to 100.00
Measurement Accuracy	Rho ± 0.04

TEST PORT

Connector	N(F) (TNC, UHF, BNC male or female adapters available)
VSWR	1.25 max
Directivity	32 dB typical

MEASUREMENT SPEED

Single Frequency Point	5 readings per second typical
Frequency Sweep	1 sweep per second typical

FIELD STRENGTH

Range	0 to 100%, relative
Sensitivity	Fullscale deflection and 0.22 V/m @ 400 MHz using supplied antenna.
AT-500	

PC INTERFACE

RS-232 protocol via DB-9 port

POWER REQUIREMENTS

Power Supply Rechargeable NiCAD battery system. Unit may be re-charged while operating using a wall adapter (included)

GENERAL REQUIREMENTS

Dimensions	8" x 4-5/8" x 1-3/4" (204 x 118 x 42 mm)
Weight	2.0 lbs (0.9 kg)
Temperature, Operating	0 to 50°C (32 to 122 °F)
Temperature, Storage	-40 to +71 °C (-40 to +160 °F)
Humidity	95% ± 5% max (noncondensing)
Compliance	Unit complies with MIL-T-28800 Class 5 except for temperature and humidity. Unit is CE-compliant and RoHS compliant

ACCESSORIES

4240-402	Interseries Adapter, N (M)
4240-403	Interseries Adapter, N (F)
4240-404	Interseries Adapter, BNC (M)
4240-405	Interseries Adapter, BNC (F)
4240-406	Interseries Adapter, TNC (M)
4240-407	Interseries Adapter, TNC (F)
4240-408	Interseries Adapter, UHF (M)
4240-409	Interseries Adapter, UHF (F)
4240-410	Interseries Adapter, SMA (M)
4240-411	Interseries Adapter, SMA (F)
5000-030	Soft Carrying Case for Model 5000-EX Digital Power Meter and Antenna Tester (AT) Series
5000-035	Hard Carrying Case for Model 5000-EX Digital Power Meter and Antenna Tester (AT) Series
7000A545	Verification Kit for Model AT-500 Antenna Tester
7000B840	PC software used to upload trace data for analysis, printing or storage

