



AT4510, M1, M3, M4 Antenna 1GHz–4.2GHz

The Model AT4510 is a wide band, high gain, microwave horn antenna that provides high field intensities. With a minimum gain of 13.0 dB over isotropic, the Model AT4510 supplies the constant high intensity fields necessary for RFI/EMI field testing within and beyond the confines of a shielded room. Specially designed septums are installed to focus the beamwidth ensuring the intensity of the field for 3 meter testing. The Model AT4510 is compact and lightweight for ready mobility, yet is built tough enough for the extra demands of outdoor use and easily mounts on a tripod or back plate. Part of a family of microwave frequency antennas the Model AT4510 provides the lower frequency microwave response required for many often used test specifications.

The AT4510 is ideally suited for radar pulse testing for both the 1.2–1.4 GHz and 2.7–3.1 GHz bands. FORD ES-XW7T-1A278-AC standard with revision dated on March 19, 2006 recommends the use of this antenna to meet the requirement for radar pulse testing in the above two bands

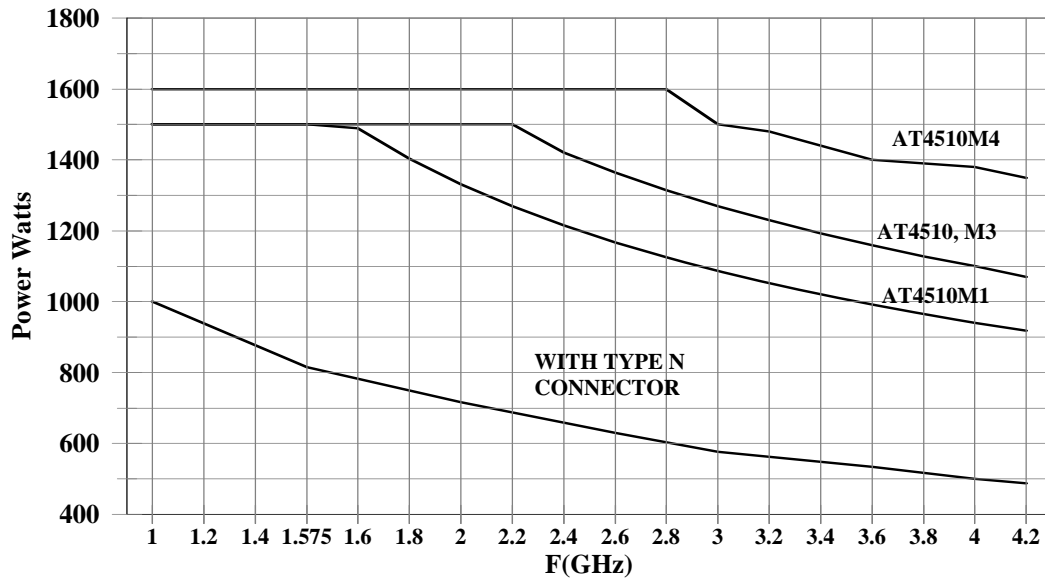
SPECIFICATIONS

FREQUENCY RANGE	1-4.2 GHz
POWER INPUT (maximum)	See Model Configuration for CW rating
PEAK INPUT POWER (maximum).....	15kW peak pulse maximum (1% duty cycle 6μs pulse width)
POWER GAIN (over isotropic)	13 dB minimum, typically increasing to 18 dB at 4.2 GHz
IMPEDANCE	50 ohms nominal
VSWR	
Maximum	2.0:1
Average.....	1.5:1
BEAM WIDTH (average)	
E Plane	See Curve
H Plane	See Curve
FRONT TO BACK RATIO (minimum)	20 dB
CONNECTOR	See Model Configurations. All models come with Type N(F) quick-change.
MOUNTING PROVISIONS.....	Mounting pads on two adjacent sides for tripod and back plate. May also be tripod mounted in two perpendicular planes using optional tripod.
WEIGHT	7.26 kg (16 lbs)
SIZE (W x H x D).....	46.3 x 46.3 x 69.2 cm (18.25 x 18.25 x 27.25 in

Model Number	Connector	CW Power Input
AT4510	7-16 DIN Female	See Derating Curve
AT4510M1	SC Female	See Derating Curve
AT4510M3*	7-16 DIN Female	See Derating Curve
AT4510M4	7/8" EIA	See Derating Curve

*M3 option includes A2LA Calibration: 1 meter horizontal and vertical polarizations.

Power Derating Curve



NOTE: When using a Type N connector, power is derated as shown above.

