



**Model ATH7G18,  
M1 through M3  
Antenna  
7.5GHz–18GHz**

The Model ATH7G18 is a wide band, high gain, microwave horn antenna that provides field intensities of up to 250 V/m. With a minimum gain of 11.2dB over isotropic, the Model ATH7G18 supplies the constant high intensity fields necessary for RFI/EMI field testing within and beyond the confines of a shielded room. A removable gain enhancer is included to insure the required field strength when conducting 3 meter testing. The Model ATH7G18 is extremely compact and light weight for ready mobility, yet is built tough enough for the extra demands of outdoor use and easily mounts on a rigid waveguide. Part of a family of microwave frequency antennas the Model ATH7G18 provides the 7.5-18GHz response required for many often used test specifications.

The ATH7G18 can also be custom calibrated to the user’s requirement for use in RF emission testing. The calibrated model is designated by adding a ‘CC’ suffix to the desired model version. Calibration details must be provided using Form 701. Contact factory for details.

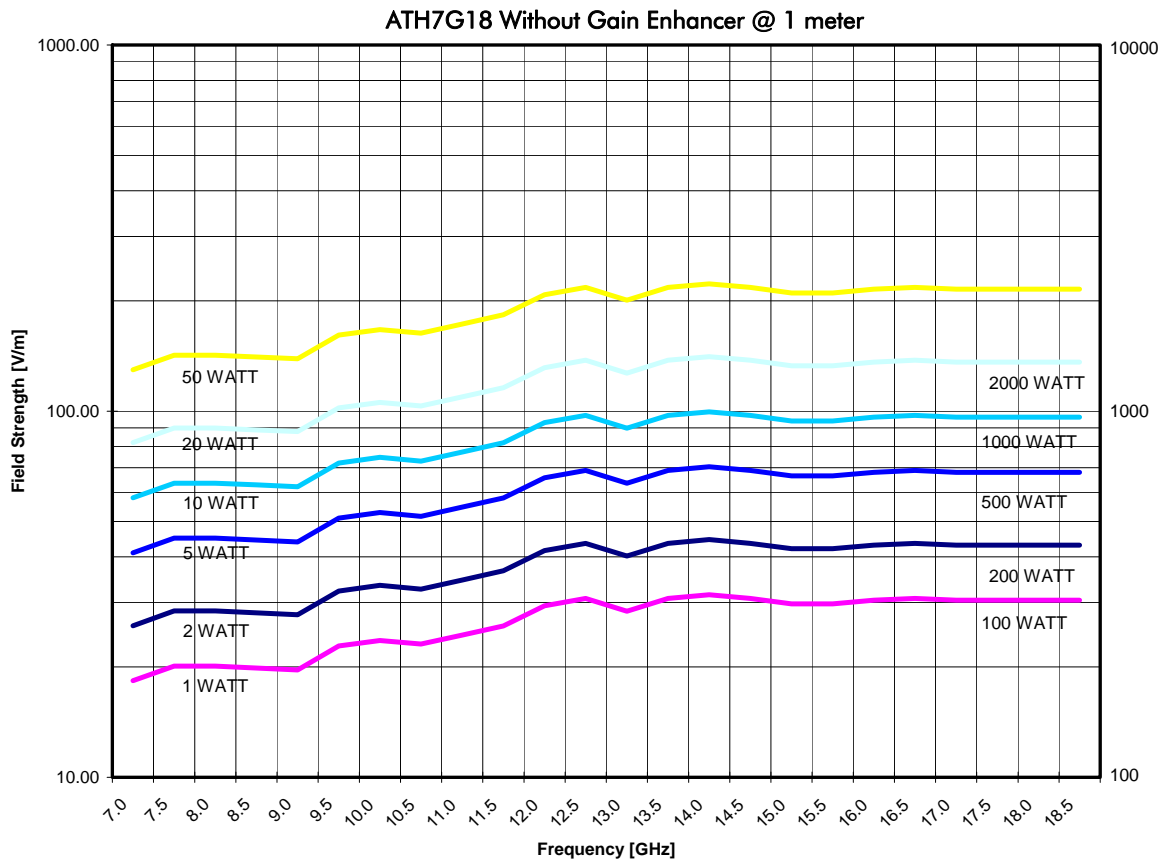
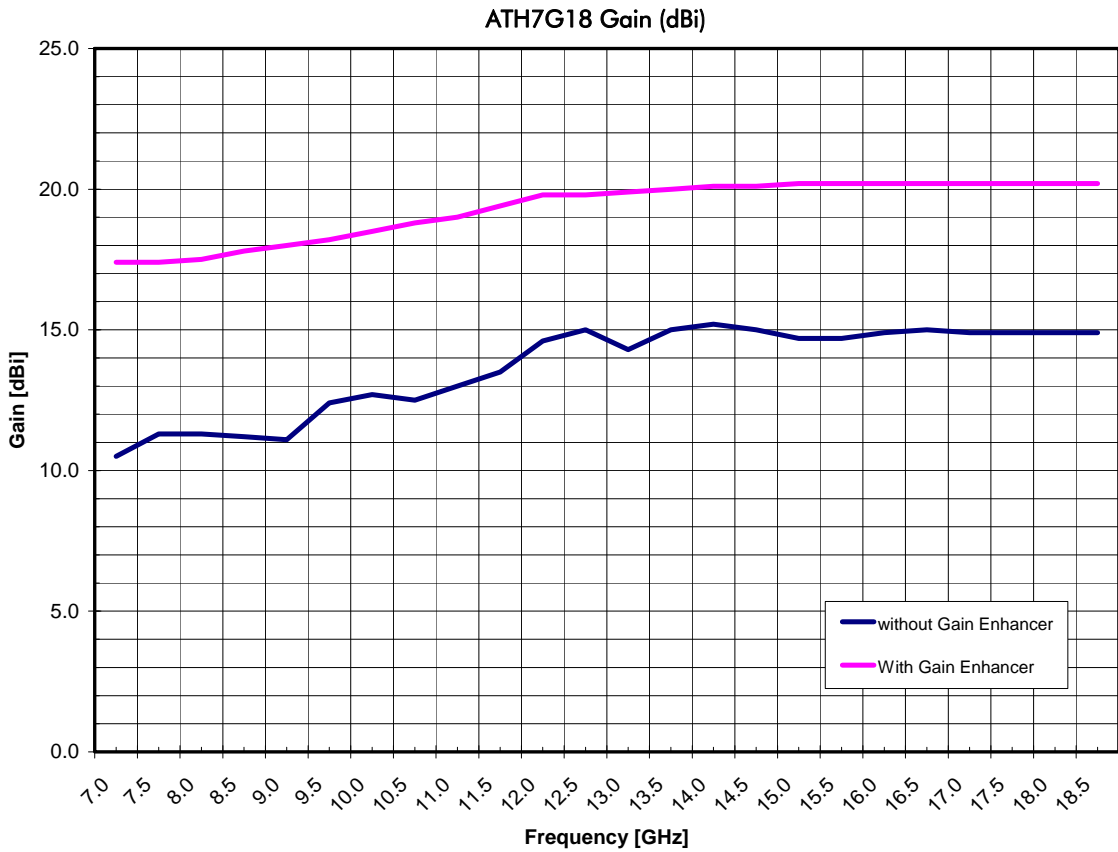
**SPECIFICATIONS**

FREQUENCY RANGE .....	7.5–18GHz
POWER INPUT (maximum) .....	2800 watts
POWER GAIN (over isotropic) .....	See Curve
With removable gain enhancer .....	See Curve
IMPEDANCE .....	50 ohms nominal
VSWR	
Maximum .....	1.2:1
Average.....	1.1:1
BEAM WIDTH (average)	
E Plane .....	See Curve
H Plane .....	See Curve
FRONT TO BACK RATIO (minimum) .....	20 dB
CONNECTOR .....	WRD 750 waveguide
MOUNTING PROVISIONS.....	Waveguide bracket
WEIGHT .....	0.6 kg (1.25 lbs)
SIZE (WxHxD)	
(without gain enhancer) .....	4.6 x 6.1 x 6.4 cm (1.8 x 2.4 x 2.5 in)
(with gain enhancer).....	8.9 x 11.4 x 13.3 cm (3.5 x 4.5 x 5.25 in)

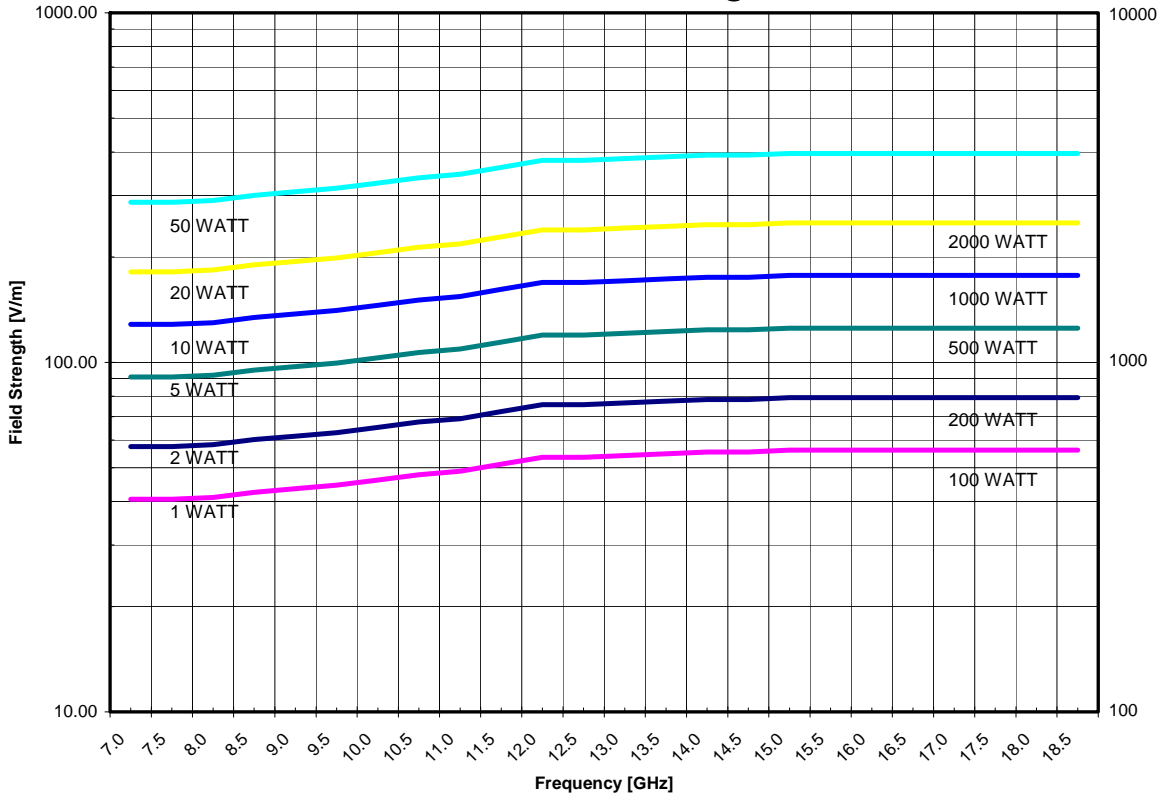
**MODEL CONFIGURATIONS**

ATH7G18	Antenna	2800 watts maximum
ATH7G18M1	Antenna with side launch adapter to Type N (f)	500 watts maximum
ATH7G18M2	Antenna with gain enhancer permanently attached	2800 watts maximum
ATH7G18M3	Side launch adapter to Type N (f), gain enhancer permanently attached	500 watts maximum

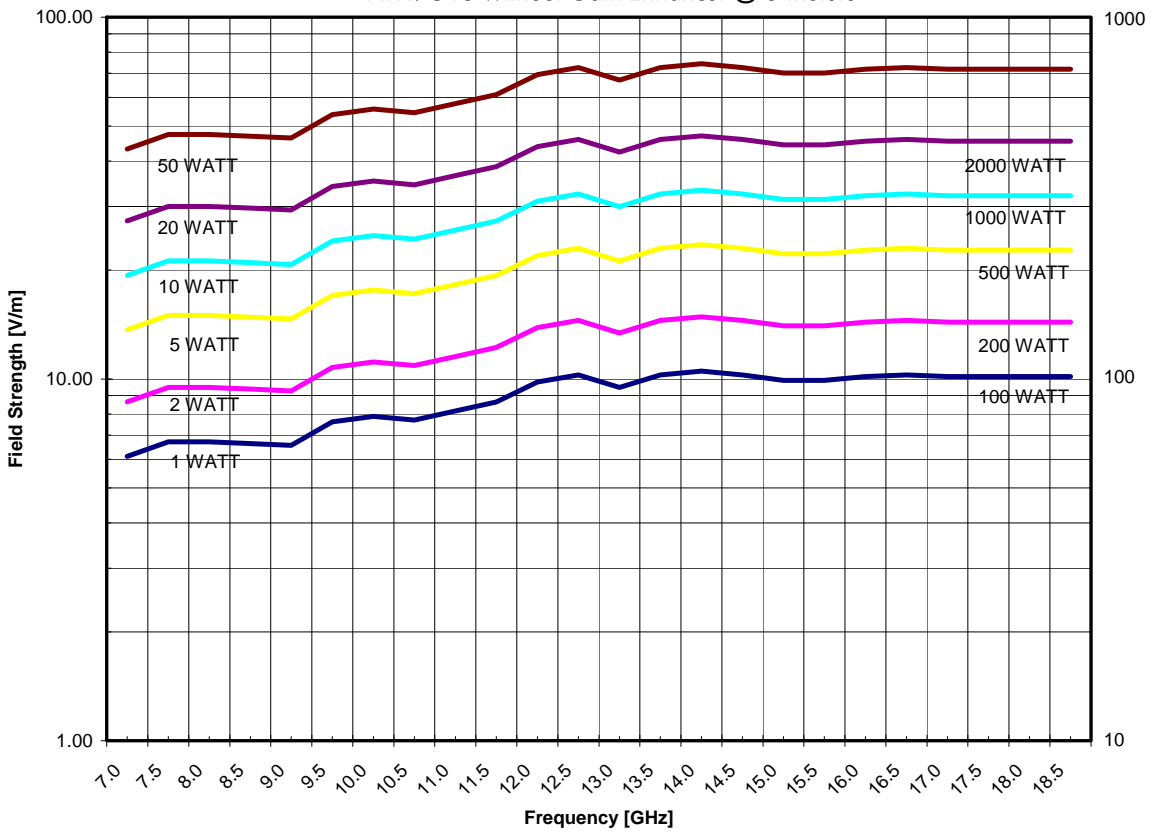
Field Strengths have been measured in free-space conditions. Individual shielded rooms, amplifiers, and test-system conditions will influence performance. Field Strength also varies with frequency and position of antenna and EUT in non-anechoic testing environments.



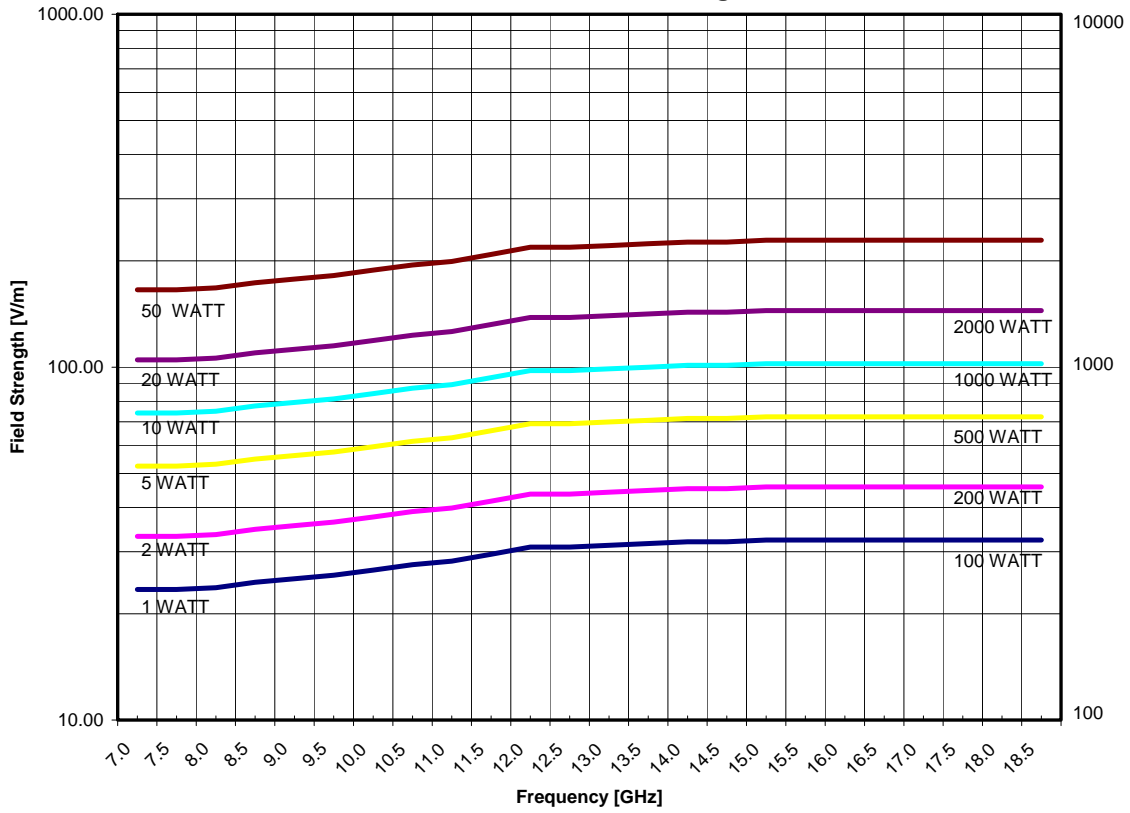
ATH7G18 With Gain Enhancer @ 1 meter



ATH7G18 Without Gain Enhancer @ 3 meters



ATH7G18 With Gain Enhancer @ 3 meters



Model ATH7G18

