



rf/microwave instrumentation

**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.

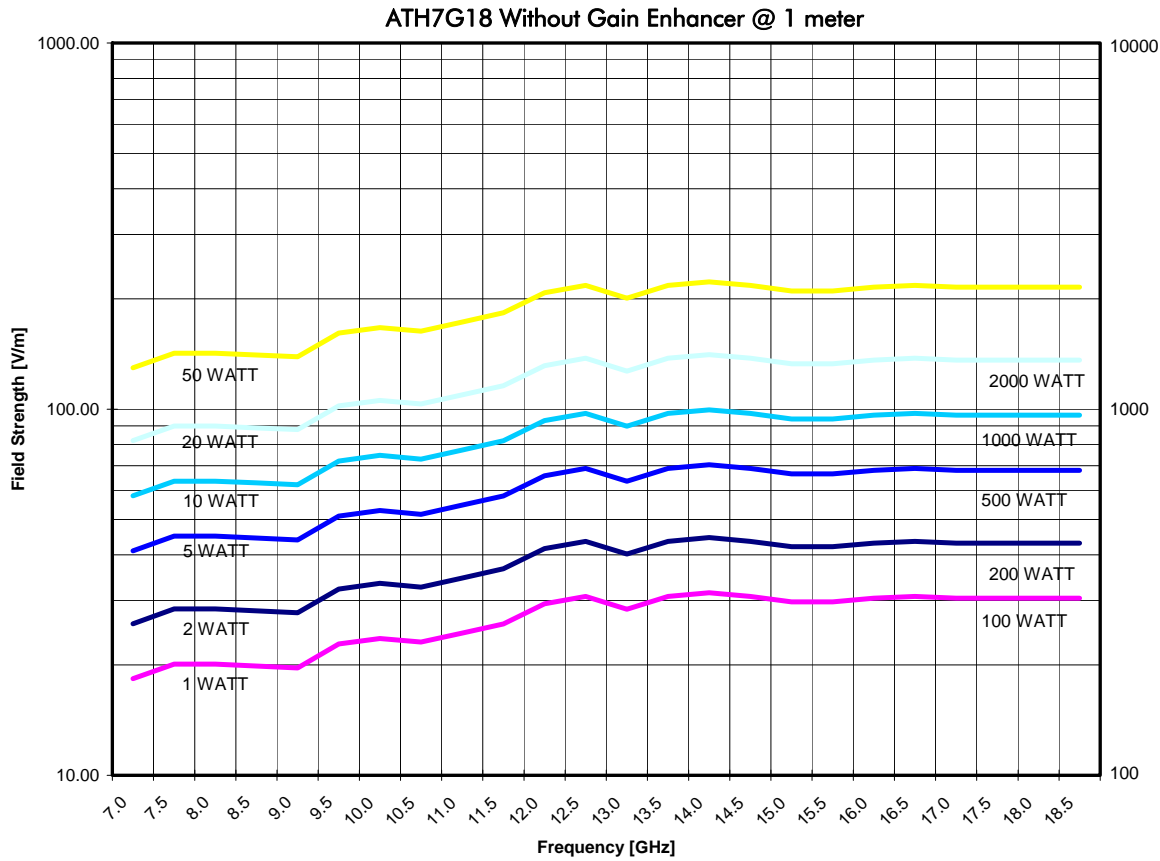
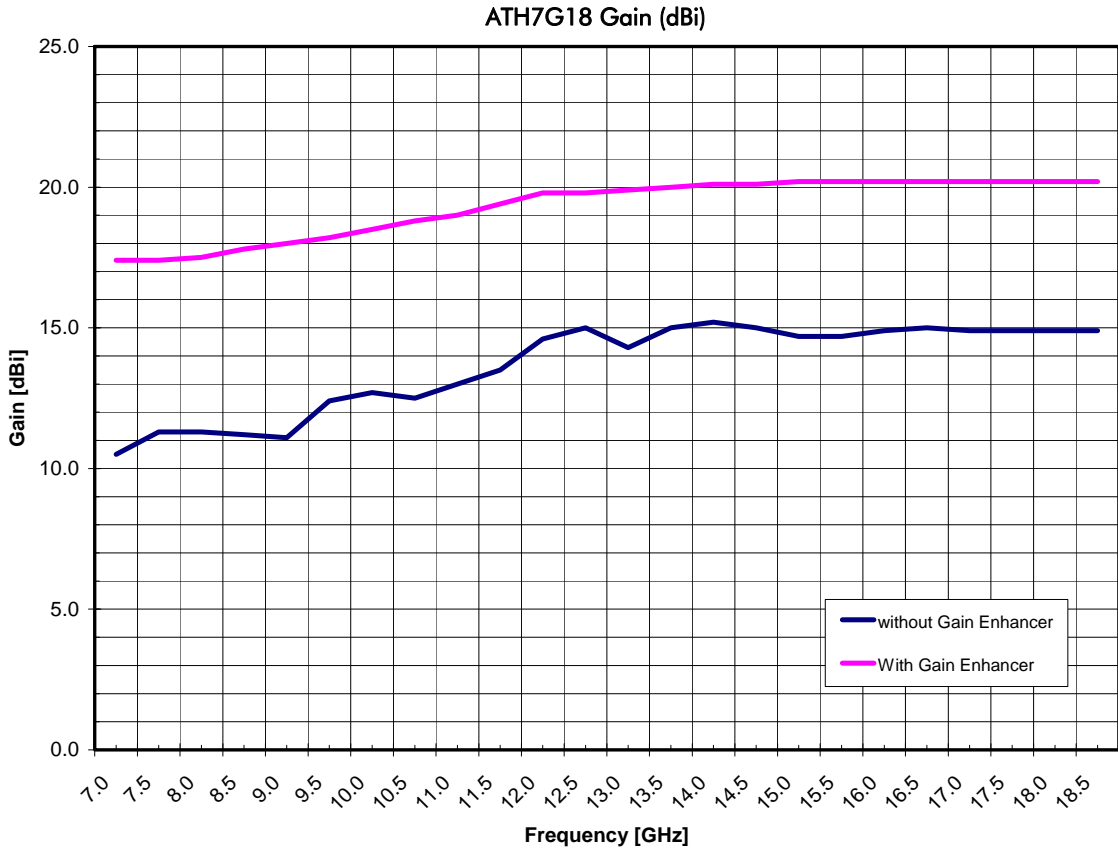
SPECIFICATIONS

| | |
|-------------------------------------|--|
| 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) |

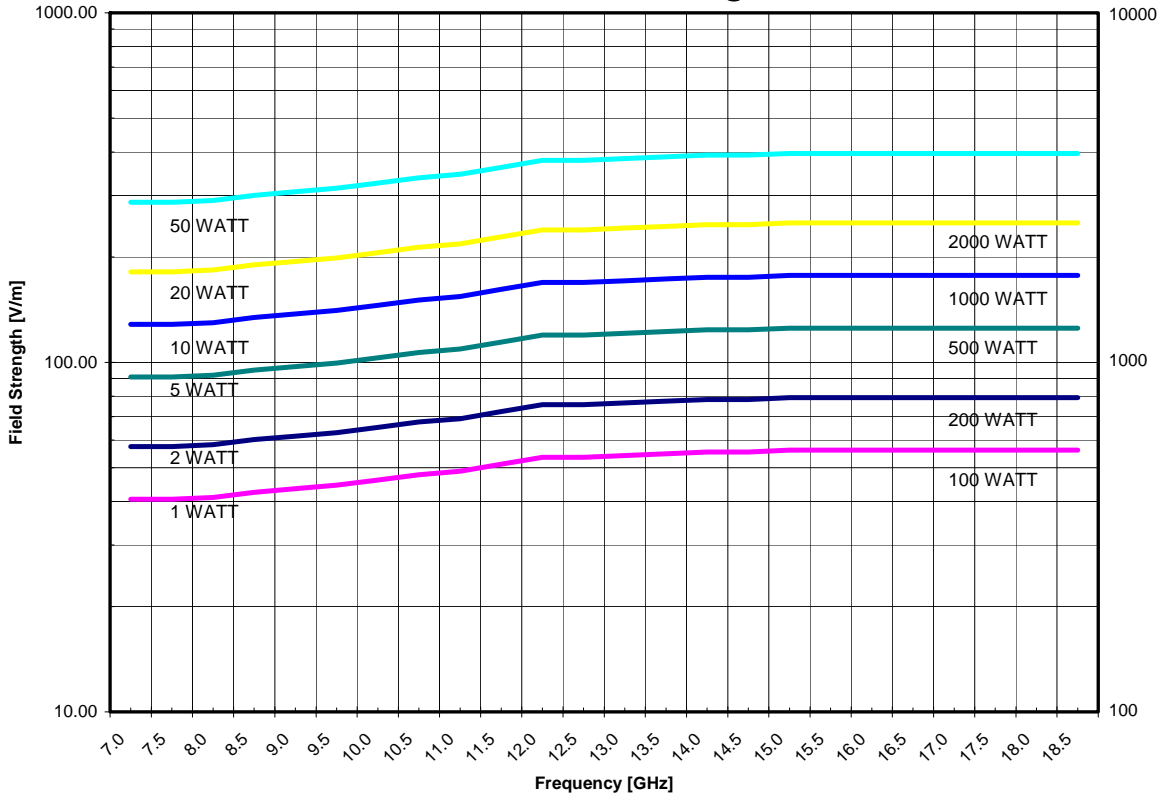
MODEL CONFIGURATIONS

| | | |
|-----------|---|--------------------|
| 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 |

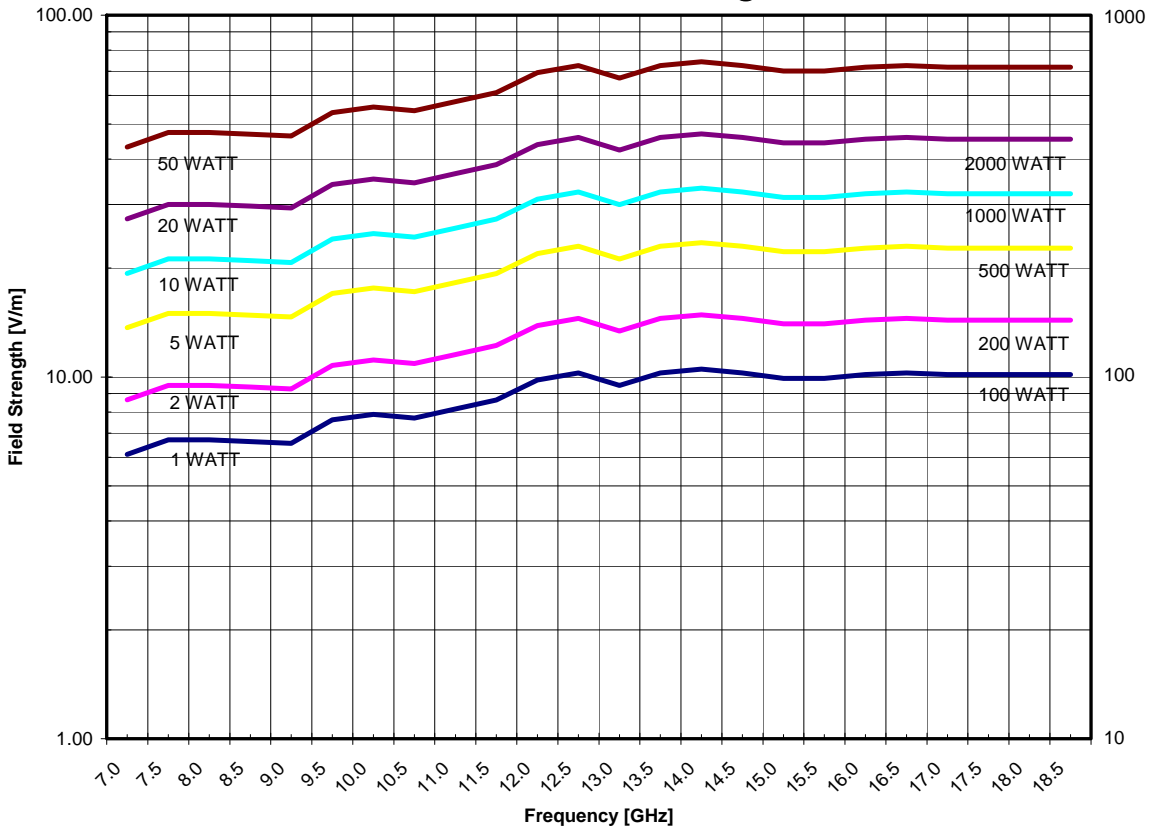
Field Strengths have been measured in free-space conditions. Individual shielded rooms, amplifiers, and test-system conditions will influence performance. Field Strength also varies with frequency and position of antenna and EUT in non-anechoic testing environments.



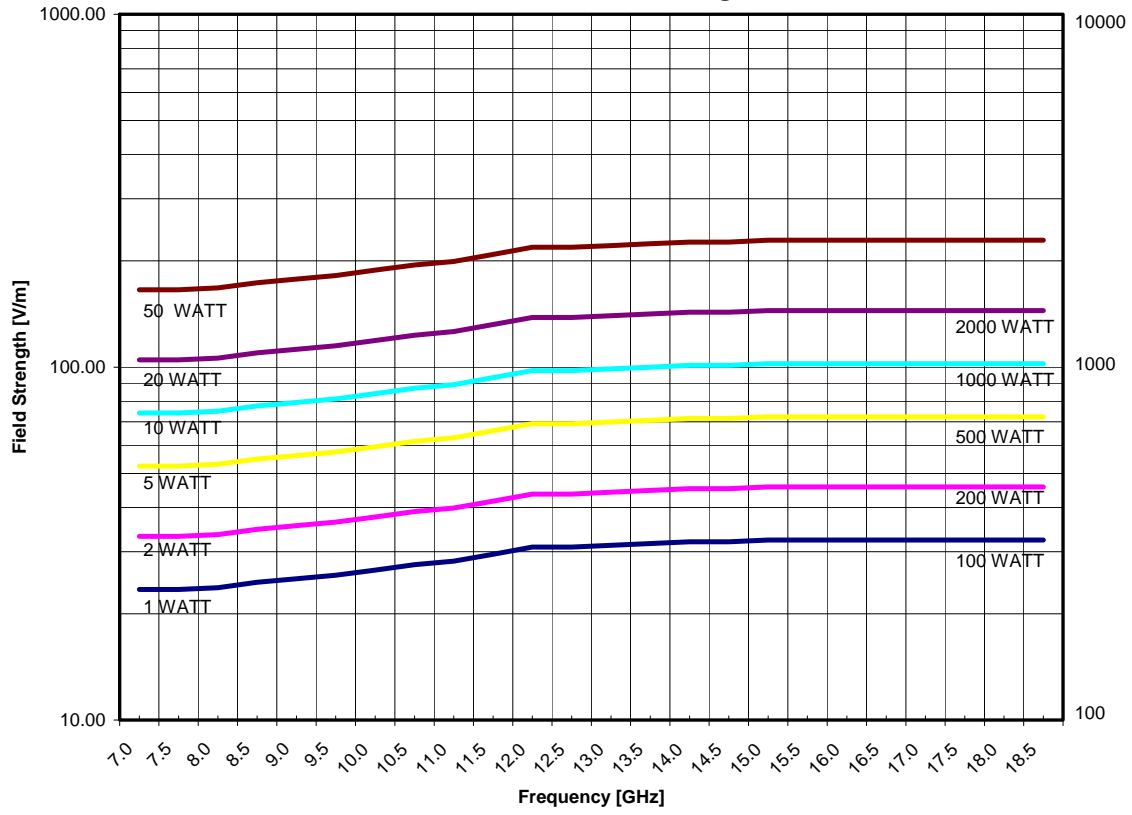
ATH7G18 With Gain Enhancer @ 1 meter



ATH7G18 Without Gain Enhancer @ 3 meters



ATH7G18 With Gain Enhancer @ 3 meters



Model ATH7G18

