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 11.2 dB 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.

**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**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Power Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATH7G18M1</td>
<td>Antenna with side launch adapter to Type N (f)</td>
<td>500 watts max</td>
</tr>
<tr>
<td>ATH7G18M2</td>
<td>Antenna with gain enhancer permanently attached</td>
<td>2800 watts max</td>
</tr>
<tr>
<td>ATH7G18M3</td>
<td>Side launch adapter to Type N (f), gain enhancer permanently attached</td>
<td>500 watts max</td>
</tr>
</tbody>
</table>
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.