

# Mag Grid Antennas

## Grid Sectional Parabolic Antennas for 1.7–2.1 GHz, 2.1–2.7 GHz, 2.4–2.5 GHz

The Mag Grid Antenna series offers a commercial grade product at an exceptionally competitive price. The die cast reflector is fabricated using an automated injection molding process which ensures consistency in performance. The high-grade magnesium alloy material is lightweight, does not rust, and memorizes the antenna's parabolic curve to maintain its shape over time. The result is the only low cost terrestrial microwave antenna sufficiently durable to survive changing climate conditions.

The patented grid reflector design provides field reliability and ease of handling and installation. No secondary coating is required to prevent rust and corrosion. Breakdown packaging saves freight costs, and optional factory assembly is available.

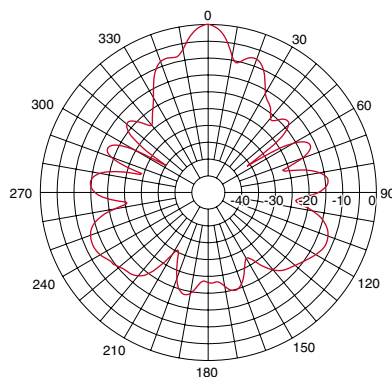
Mag Grid series antenna products are also available with an industrial grade mounting option. This option features a heavier gauge L-bracket, mast clamp, and u-bolt with mounting centers compatible for pipes of up to 2.5 inches in diameter. The L-bracket attaches using 4 previously unoccupied holes in a thicker section of the reflector. These holes are located farther from the center of the assembled unit, spreading forces over a wider range of reflector space. There are no changes to hardware style or assembly and installation procedures. The result is an antenna very suitable for higher elevation installations and tower mounts without the cost and complexity of traditional broadcast tower antenna mounts.

### Features

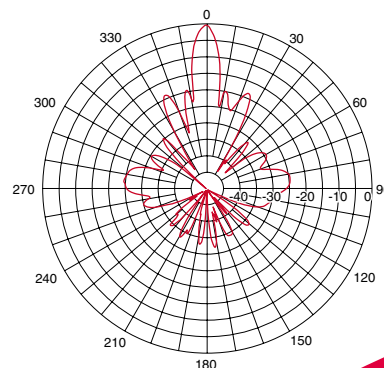
- **Commercial grade durability**
- **Lower production, shipping, and handling costs**
- **Lightweight, durable materials**
- **RG8 pigtail – 24" extension**
- **Up to 60° tilt adjust**



**The low cost antenna durable enough to withstand changing climates**



**18T-2400-x**  
 Gain = 17.73 dBi  
 Frequency = 2.5 GHz  
 10 dB BW = 33.7°  
 3 dB BW = 12°



**26T-2400-x**  
 Gain = 23.91 dBi  
 Frequency = 2.5 GHz  
 10 dB BW = 11.6°  
 3 dB BW = 5.9°

## Specifications for Mag Grid Sectional Parabolic Antennas

### Electrical Specifications

| <u>Antenna Model Number</u> | <u>18T-1900/2127/2400</u> | <u>26T-1900/2127/2400</u> |
|-----------------------------|---------------------------|---------------------------|
| Gain, dBi                   | 14/16/17 ±1               | 21/24/24 ±1               |
| Polarization isolation, dB  | >20                       | >24                       |
| Side lobe suppression, dB   | >8                        | >16                       |
| -3 dB beamwidth, degree     | 14                        | 14/7.5/7.5                |
| -10 dB beamwidth, degree    | 35                        | 24/11/11                  |
| Front/back ratio, dB        | >20                       | >30                       |
| Impedance, ohm              | 50                        | 50                        |
| VSWR typical                | 1.6:1                     | 1.6:1                     |
| Pigtail extension, in (m)   | 24" RG8 (0.61)            | 24" RG8 (0.61)            |

### Mechanical Specifications

| <u>Antenna Model Number</u>        | <u>18T-1900/2127/2400</u>      | <u>26T-1900/2127/2400</u>           |
|------------------------------------|--------------------------------|-------------------------------------|
| Output connector*                  | "N" type male/female           | "N" type male/female                |
| Standard mounting, in (mm)         | 1–2" (25–51) O.D. pipe         | 1–2" (25–51) O.D. pipe              |
| Industrial mounting, in (mm)       | —                              | 1.25–2.5" (0.028 x 0.063) O.D. Pipe |
| Vertical tilt, degree              | 0–60                           | 0–60                                |
| Operational wind load              | 75 mph, 25 lb (11.34 kg)       | 75 mph, 63.8 lb (28.94 kg)          |
| Survivable wind load               | 140 mph, 77.9 lb (35.33 kg)    | 140 mph, 199.5 lb (90.49 kg)        |
| Reflector type                     | Parabolic grid                 | Parabolic grid                      |
| Reflector material                 | Cast magnesium alloy           | Cast magnesium alloy                |
| Dimensions, in (mm)                | 16 x 20 x 15 (406 x 510 x 380) | 23.5 x 39.25 x 15 (600 x 997 x 380) |
| Weight – Antenna, lb (kg)          | 1.8 (.81)                      | 4.6 (2.07)                          |
| Weight – Standard mount, lb (kg)   | .06 (.027)                     | .09 (.041)                          |
| Weight – Industrial mount, lb (kg) | —                              | 1.5 (.675)                          |

\* N male connector standard. N female available by adding "F" (i.e. 26T-2400F-1).

\*\*Robust 1.5"–2.5" O.D. version available. Contact factory.

### Ordering Information

| <u>Frequency Band, MHz</u> | <u>Gain, dBi</u> | <u>Single Pack Type Number</u> | <u>Bulk Pack Type Number</u> |
|----------------------------|------------------|--------------------------------|------------------------------|
| 1700–2100                  | 14               | 18T-1900-1                     | 18T-1900-10 (10 per)         |
| 1700–2100                  | 21               | 26T-1900-1                     | 26T-1900-6 (6 per)           |
| 2100–2700                  | 16               | 18T-2127-1                     | 18T-2127-10 (10 per)         |
| 2100–2700                  | 24               | 26T-2127-1                     | 26T-2127-6 (6 per)           |
| 2400–2500                  | 17               | 18T-2400-1                     | 18T-2400-10 (10 per)         |
| 2400–2500                  | 24               | 26T-2400-1                     | 26T-2400-6 (6 per)           |



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