

# Instruction Sheet

**WARNING! YOU CAN BE KILLED!**  
**DO NOT INSTALL NEAR POWER LINES!**  
**DO AS MUCH ASSEMBLY AS POSSIBLE**  
**ON THE GROUND!**

## GD5W Grid Dish Parabolic Antenna 4940 to 5850 MHz Operation

**Step 1:** Decide if Horizontal Polarity (HPOL) or Vertical Polarity (VPOL) is required. The polarity is changed by rotating the entire feed horn/antenna assembly on the bracket. Also decide if uptilt or downtilt will be required. The bracket can be mounted to provide uptilt or downtilt. If using for 21dB grid, the feedhorn bracket flange needs to be moved forward to reduce the focal length. See diagram below.

**Step 2:** Clip on the optional metal gain booster subreflector to the feedhorn. Using the subreflector will provide an additional ~0.5dB gain. Assemble the feedhorn/antenna and bracket by inserting 2 screws through the feed horn mount and then additional screws into the remaining bracket hole/s. The feedhorn must be mounted so that the base flange and plastic radom are parallel with the small wires of the grid as shown.

**Step 3:** Install the antenna assembly to the pole using the V Block pole clamp and U Bolt. Adjust to desired rotation and angular position and then tighten U-Bolt nuts.

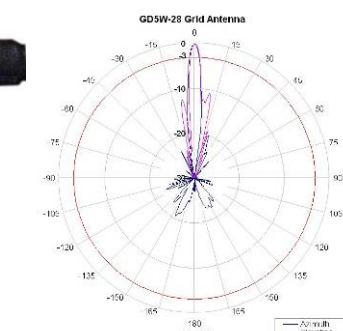
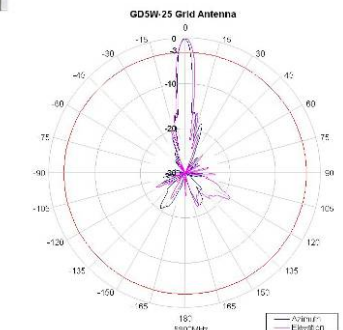
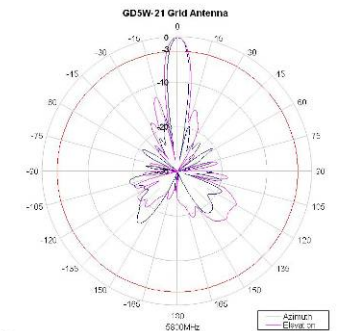
### Specifications

| Parameter                   | Model                         | Min  | Typ                          | Max     | Units     |
|-----------------------------|-------------------------------|--|------------------------------|---------|-----------|
| <b>Frequency Range</b>      | GD5W                          | 4940   |                              | 5850    | MHz       |
| <b>Gain</b>                 | GD5W-21<br>GD5W-25<br>GD5W-28 |  | 21<br>25<br>28               |         | dBi       |
| <b>Horizontal Beamwidth</b> | GD5W-21<br>GD5W-25<br>GD5W-28 |  | 10<br>6<br>4                 |         | Deg       |
| <b>Vertical Beamwidth</b>   | GD5W-21<br>GD5W-25<br>GD5W-28 |  | 11<br>6<br>5                 |         | Deg       |
| <b>Front to Back</b>        | GD5W-21<br>GD5W-25<br>GD5W-28 | 18<br>20<br>25   |                              |         | dB        |
| <b>VSWR</b>                 |                               |  | 1.5:1                        |         |           |
| <b>Impedance</b>            |                               |  | 50                           |         | OHM       |
| <b>Input Power</b>          |                               |  |                              | 100     | W         |
| <b>Operating Temp</b>       |                               | -40  |                              | +70     | Deg C     |
| <b>Pole Size</b>            |                               | 1" (25)  |                              | 2" (50) | In (mm)   |
| <b>Weight</b>               | GD5W-21<br>GD5W-25<br>GD5W-28 |  | 3 (1.4)<br>6 (2.7)<br>11 (5) |         | Lbs. (kg) |
| <b>Dimension (W x L)</b>    | GD5W-21<br>GD5W-25<br>GD5W-28 | 11.8" x 15.7" (300 x 400)<br>16.8" x 24" (427 x 610)<br>28.5 x 36" (724 x 914) |                              |         | In (mm)   |
| <b>Bracket Tilt</b>         |                               |  | +/-45                        |         | Deg       |



GD5W-25 Vertical Polarity

### Antenna Patterns @ 5.8GHz



| Wind Loading (lbs) | 100 MPH | 125 MPH | 100MPH with 1/2" Radial Ice |
|--------------------|---------|---------|-----------------------------|
| GD5W-21            | 10      | 15.6    | 48                          |
| GD5W-25            | 20      | 31      | 99                          |
| GD5W-28            | 41      | 64      | 257                         |



Bracket set for downtilt

To change feedhorn for 21db grid, loosen both screws, slide flange bracket forward to position front set screw over 21db positioning flat. Flange must be parallel with plastic radom. Tighten both screws.

