

# Product Data Sheet

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## KP-5PDN-1

1' Parabolic Antenna 4900MHz–6400MHz with Mimosa Adapter

- Simplified installation with patent pending quick-connect waveguide technology and built-in universal pipe-mount bracket for connectorized radios
- Optimized front to back and side lobes suppression eliminates interference
- Heavy-duty bracket with fine elevation and azimuth adjustment

### Electrical Specification

| Frequency Band                     | MHz    | 4900-5400         | 5400-5900         | 5900-6400         |
|------------------------------------|--------|-------------------|-------------------|-------------------|
| Gain                               | dBi    | 22.5±0.75         | 24.0±0.5          | 24.5±0.8          |
| Polarization                       |        | H/V or ±45 Slant  |                   |                   |
| Horizontal HPBW                    | Degree | 10.0±0.4          | 8.8±0.2           | 8.0±0.2           |
| Vertical HPBW                      | Degree | 10.1±0.3          | 8.7±0.2           | 7.9±0.2           |
| Front-to-Back Ratio @ 180°±30°     | dB     | 35                | 35                | 35                |
| Cross-polarization Ratio over HPBW | dB     | 25                | 25                | 25                |
| VSWR                               |        | 1.5 typ   1.7 max | 1.3 typ   1.5 max | 1.3 typ   1.8 max |
| Return Loss                        | dB     | 14 typ   12 max   | 18 typ   14 max   | 18 typ   11 max   |
| Port-to-Port Isolation             | dB     | 30                | 30                | 23                |
| Max. Input Power per Port          | W      | 25                | 25                | 25                |
| Impedance                          | Ohms   |                   | 50                |                   |

### Mechanical Specifications

|                            |                                  |
|----------------------------|----------------------------------|
| Diameter, nominal          | 15"                              |
| Antenna Input              | 2 x N-type Female Connectors     |
| Dish Main Reflector Color  | Grey                             |
| Radio Adapter Color        | Grey                             |
| Wind Load, Axial           | 650 N   146 lbf                  |
| Wind Velocity, Operational | 145 km/h   90 mph                |
| Wind Velocity, Survival    | 201 km/h   125 mph               |
| Temperature Range          | -40° to +60° C   -40° to +140° F |

### Bracket Specifications

|                           |                                   |
|---------------------------|-----------------------------------|
| Fine Azimuth Adjustment   | ±20°                              |
| Fine Elevation Adjustment | ±22°                              |
| Mounting Type             | Pipe Mount                        |
| Net Weight                | 6kg   13.2 lb                     |
| Mounting pole diameter    | 19 mm – 114 mm   0.75 in – 4.5 in |
| Antenna-to-Pipe Distance  | 172 mm   6.8 in                   |

ANTENNAS ENGINEERED & MANUFACTURED TO EXCEED INDUSTRY STANDARDS

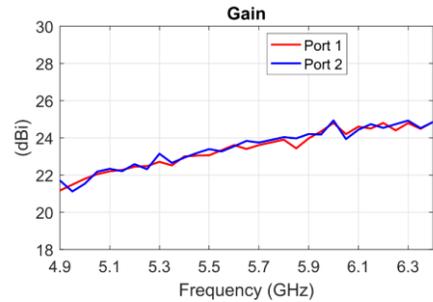
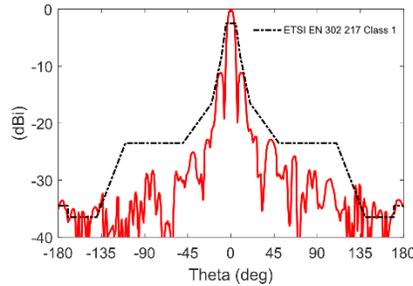
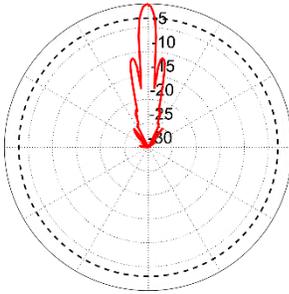
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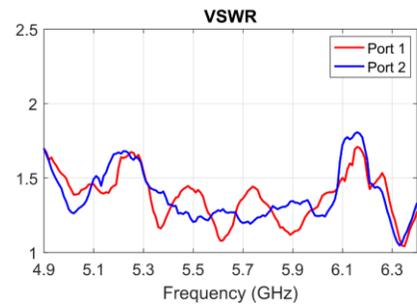
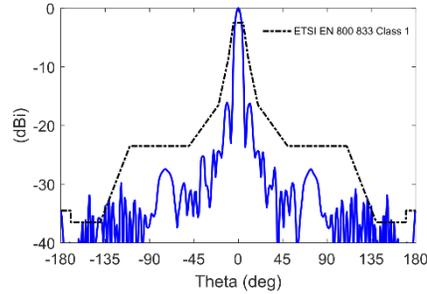
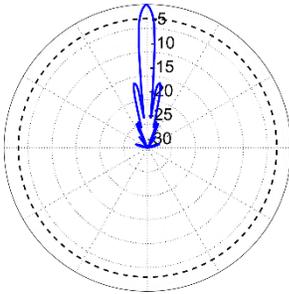


## Graphical Data

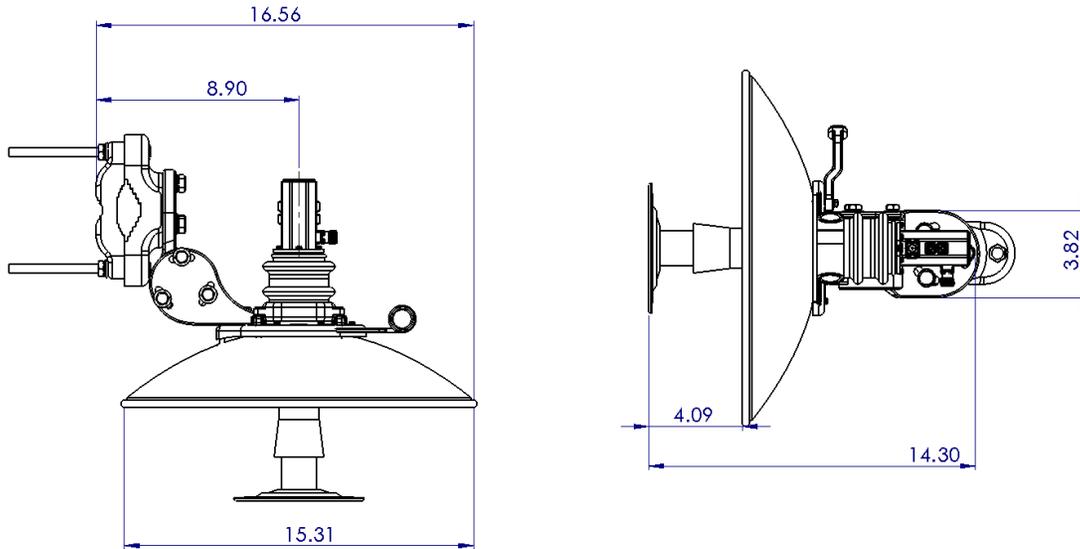
### Azimuth Patterns



### Elevation Patterns



## Mechanical Drawings



\*ALL UNITS IN INCHES

## Appendix

HPBW: Average and variation of the antenna's 3dB beamwidth (half power beamwidth) in its horizontal (Azimuth) or vertical (Elevation) pattern.

Gain: Antenna's average gain and variation in each frequency band.

Front to Back Ratio @  $180^\circ \pm 30^\circ$ : Difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over  $\pm 30^\circ$  angles.

Cross-polarization Ratio over HPBW (dB): Maximum difference between the co-polarization and cross-polarization gain across the sector's HPBW.

Wind load, Axial: Force applied to the face of the antenna due to wind at the specified operational wind speed.

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