

# Product Data Sheet



## KP-3DPFP20

3.5 GHz to 3.8 GHz, 15 Degree Flat Panel Antenna, 20 dBi, 2-Port,  $\pm 45$  Slant Polarization

- Stable 20 dBi gain in a small-profile 15" x 15" x 1" form factor
- Polarization-Adjustable Pipe Mount Brackets
- Industrial design with UV-resistant radome and rugged mounting hardware
- Suppressed side lobes and superior front to back reduces interference in point-to-point links in the CBRs band

### Electrical Specification

|  |        |                       |
|--|--------|-----------------------|
| Frequency Band   | MHz    | 3500-3800             |
| Gain   | dBi    | 20.0 $\pm$ 0.5        |
| Polarization   |        | H/V or $\pm 45$ Slant |
| Horizontal HPBW  | Degree | 15 $\pm$ 1            |
| Horizontal Squint  | Degree | $\pm 1$               |
| Vertical HPBW  | Degree | 16 $\pm$ 1            |
| Electrical Downtilt                                      | Degree | 0                     |
| Front-to-Back Ratio @ 180 $^{\circ}$ $\pm$ 30 $^{\circ}$ | dB     | 25                    |
| Cross-polarization Ratio Over HPBW                       | dB     | 15                    |
| VSWR   |        | 1.3 typ   1.5 max     |
| Return Loss  | dB     | 17 typ   14 max       |
| Max. Input Power per Port                                | W      | 50                    |
| Impedance  | Ohms   | 50                    |

### Mechanical Specifications

|                       |  |
|-----------------------|--|
| RF Connector Type     | N-Type Female  |
| RF Connector Quantity | 2  |
| RF Connector Position | Bottom of reflector  |
| Electrical Grounding  | RF connector grounded to reflector and mounting bracket                  |
| Radome Material       | UV Resistant ABS   |
| Ingress Protection    | IP55 rain and dust resistant   |
| Max. Wind Speed       | 210km/h   130mph   |
| Temperature Range     | -40 $^{\circ}$ to +60 $^{\circ}$ C   -40 $^{\circ}$ to +140 $^{\circ}$ F |

### Bracket Specifications

|                          |                                 |
|--------------------------|---------------------------------|
| Material Type            | Powder Coated Galvanized Steel  |
| Mechanical Tilt (Degree) | $\pm 15$                        |
| Mounting Type            | Pipe Mount or Wall Mount        |
| Mounting pole diameter   | 30 mm – 60 mm   1.2 in – 2.0 in |

### Antenna Dimensions

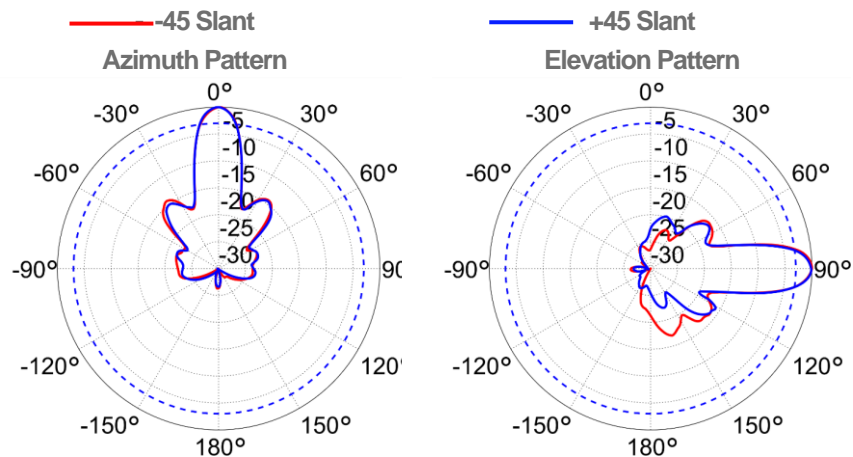
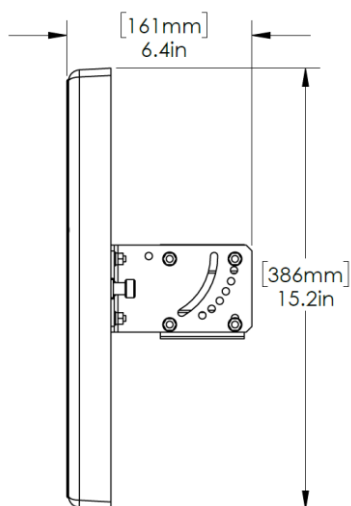
|                           |                  |
|---------------------------|------------------|
| Length                    | 386 mm   15.2 in |
| Width                     | 386 mm   15.2 in |
| Height                    | 30 mm   1.2 in   |
| Net Weight, with brackets | 2.2 kg   4.8 lb  |

# Product Data Sheet

## Shipping Dimensions

|                           |        |  |        |
|---------------------------|--------|--|--------|
| Length                    | 406 mm |  | 16 in  |
| Width                     | 406 mm |  | 16 in  |
| Height                    | 89 mm  |  | 3.5 in |
| Net Weight, with brackets | 2.4 kg |  | 5.3 lb |

## Graphical Data



## Appendix

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

Horizontal Squint: Angle in the antenna's azimuth pattern in which the maximum gain occurs. Reported is the maximum variation in the frequency band.

Electrical Downtilt: Angle in the antenna's elevation pattern in which the maximum gain occurs.

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

Front to Back Ratio @ 180°±30°: Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles.

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