

# 3.5-3.8 GHz, 1-Foot, 20 dBi, Parabolic Antenna, Dual Polarized with N-type Female Connectors on 36" LMR200 Cables

## KP-35PD1-N



#### **Features**

- · 20dBi gain with 1ft dish
- 2 x 2 MIMO dual polarization +/-90deg
- Rugged design with heavy-duty brackets and thick powder coat- Compact shipping size ing for industrial and corrosive applications
- Comes with 36" LMR 200 Pigtails and N-type Female Connectors
- · Low side lobes and high front to back

# **Applications**

- 3.5 GHz Citizens Broadband Radio Service (CBRS) applications SOFDMA
- Wireless LAN systems & IEEE 802.16e applications
- Mobile WiMAX Wireless Internet Provider "cell" sites
- · Outdoor or indoor point-to-point (PtP) requiring high gain

### Description

The KP-35PD1-N is 1-foot Parabolic Antenna that combines two ports with dual horizontal and vertical polarization and provides high 20 dBi gain with a 18 degree beamwidth. It is a rugged and professional quality antenna that includes 36" LMR 200 pig-tail cables with N-female connectors. This parabolic antenna is designed primarily for 2x2 MIMO point-to-point or point-to-multipoint applications in the 3.5 GHz Citizens Broadband Radio Service (CBRS) frequency band. The small 14" x 14" x 14" parabolic antenna provides high gain with low side lobes and high front to back ratio for stable PtP links. This antenna supports LTE deployments in the CBRS 3.5 - 3.8 GHz spectrum.

The 1-foot parabolic antenna features an industrial-grade, powder-coated reflector, feed horn, and mounting brackets which allow 15 degree if elevation mechanical tilt. and allows pipe-mount installation pipe diameter from 1.2" to 2.5". This CBRS parabolic antenna is built to withstand speeds of up to 130 mph and survive in a wide range of challenging environments.

# Configuration

Design Application Band Band Type Radiation Pattern Polarization Connector Type Number of Ports

Parabolic **CBRS** Sinale Directional Vertical/Horizontal N Female

## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	3.5		3.8	GHz
Input VSWR		1.5:1	1.7:1	
Impedance		50		Ohms
Gain		20		dBi
Front to Back Ratio		25		dB
Electrical Downtilt		0		Degrees
Cross Polarization Ratio	25			dB
Horizontal (Azimuth) HPBW		18		Degrees

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 3.5-3.8 GHz, 1-Foot, 20 dBi, Parabolic Antenna, Dual Polarized with N-type Female Connectors on 36" LMR200 Cables KP-35PD1-N



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Vertical (Elevation) HPBW	17		Degrees
Input Power		50	Watts

Electrical Specification Notes: Max input power is 50W per port.

# **Mechanical Specifications**

 Width
 14 in [355.6 mm]

 Height
 14 in [355.6 mm]

Mounting Mast Diameter 1.2 to 2.5 in [30.48 to 63.50 mm]

# **Environmental Specifications**

**Temperature** 

Operating Range -40 to +60 deg C Wind Survivability 125 MPH [201.17 KPH]

Compliance Certifications (see product page for current document)

## **Plotted and Other Data**

Notes:

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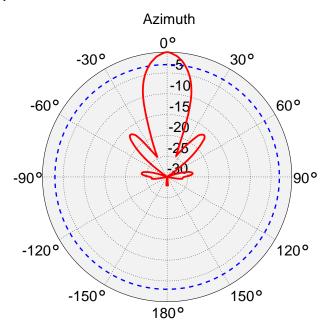


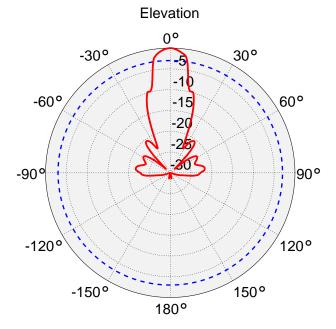
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# **KP-35PD1-N**



# **Typical Radiation Pattern**





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## **Appendix**

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

Gain: Antenna's average gain.

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 (dB): Typical difference between the co-polarization and cross-polarization gain across the sector's 3 dB Beam Width.

Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz, 2.4 GHz, 3 GHz, and 5 GHz frequencies.

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URL: https://www.kpperformance.com/3-5ghz-to-3-8ghz-20-dbi-dual-polarized-1-foot-parabolic-antenna-kp-35pd1-n-p.aspx

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. KP Performance reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. KP Performance does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and KP Performance does not assume liability arising out of the use of any part or document.

# **KP-35PD1-N CAD Drawing**

