

4950 MHz to 7125 MHz, 1-foot Parabolic Antenna, 2x2 MIMO, 25 dBi, RPSMA

**KP-6PDN-1-RSP**



**Features**

- 1-Foot standard parabolic antenna
- 4950 to 7125 MHz, 25 dBi
- VSWR < 2.5:1
- All aluminum dish
- Dual slant (V/H or ±45°)
- 50 W max input power per port
- 2 x RPSMA female connectors
- DC ground

**Applications**

- Long distance backhaul
- Point to point data links (PtP)
- Point to multi-point data links (PtMP)
- Wi-Fi 5, Wi-Fi 6, Wi-Fi 6E and Wi-Fi 7
- Unlicensed 5GHz and 6GHz bands
- 5G bands - n46, n47, n96, n102, n104
- 2x2 MIMO capability
- High speed internet access

**Description**

The KP Performance KP-6PDN-1-RSP parabolic antenna is for point to point communications that uses a parabolic reflector to direct the waves to the receiver in its focal point. It has a frequency range of 4950 to 7125 MHz, providing stability over a wide bandwidth to support gigabit transmissions and has operating temperature ranging from -40°C to 70°C (-32°F to 158°F). This antenna has a 25 dBi high gain, which describes electrical power conversion capability.

The KP Performance KP-6PDN-1-RSP parabolic antenna has an RP-SMA connector capable of carrying microwave frequencies used to join coaxial cables. This point to point antenna has a 50 Ohms impedance and is highly directional, which means it receives greater power in a specific direction. This antenna features dual slant (V/H or ±45°) polarization, which makes them compatible with any single or dual polarized 2 x 2 MIMO radio and eliminates the risk of link strength degradation due to polarization mismatch.

The KP Performance white parabolic antenna is of 1 foot size and has less than 2.5 VSWR (Voltage Standing Wave Ratio) that results in the best power transfer and reduced losses. It has 50 W maximum power per port within which it has the ability to perform without damage. This antenna has dc ground lightning protection to protect the system from damage due to lightning strikes.

This KP Performance KP-6PDN-1-RSP parabolic antenna, 4950 to 7125 MHz, 25 dBi is in stock and ready to ship same-day. This high-performance 25 dBi wifi 6e antenna is ideal for 4.9/5.1/5.3/5.4/5.8/6 GHz ISM and UNII band, Wi-Fi 6e and Wi-Fi 7, and long distance backhaul and point to point data link applications. Based on your specifications, our expert technical support and highly trained sales team can find the ideal 4950 to 7125 MHz, 25 dBi parabolic antenna.

**Configuration**

Design	Parabolic
Application Band	MIMO
Band Type	Single
Polarization	H/V or 45 Deg. Slant
Connector Type	SMA Reverse Polarity
Interface 2	SMA Reverse Polarity
Number of Ports	2
Lightning Protection	DC Grounded

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	4,950		7,125	MHz

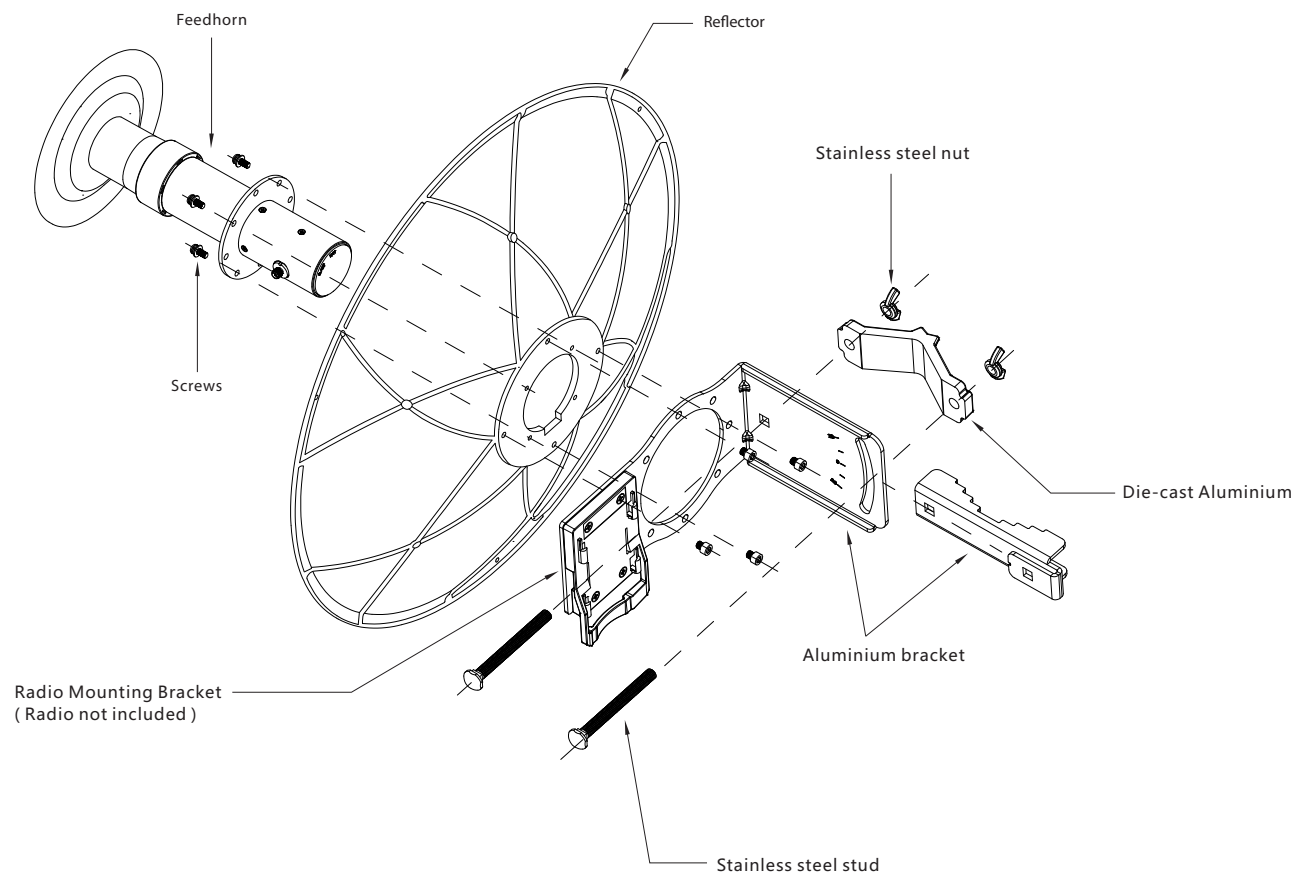
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[4950 MHz to 7125 MHz, 1-foot Parabolic Antenna, 2x2 MIMO, 25 dBi, RPSMA KP-6PDN-1-RSP](#)

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**KP-6PDN-1-RSP**



Input VSWR		2:1	
Impedance	50		Ohms
Front to Back Ratio	30		dB
Horizontal (Azimuth) HPBW	9		Degrees
Vertical (Elevation) HPBW	9		Degrees
Input Power		50	Watts



**Specifications by Band**

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
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**KP-6PDN-1-RSP**



Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	4.95 to 5.1	5.1 to 5.9	5.9 to 7.125			GHz
Gain	24	24.5	25			dBi
VSWR Max	2.5:1	2:1	2:1			

**Mechanical Specifications**

Radome Material	Aluminum
<b>Size</b>	
Length	15.7 in [398.78 mm]
Width	15.7 in [398.78 mm]
Height	5 in [127 mm]
Mounting Mast Diameter	1.1811 to 1.9685 in [30.00 to 50.00 mm]
Weight	8.35 lbs [3.79 kg]

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-40 to +70 deg C

**Plotted and Other Data**

Notes:

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### KP-6PDN-1-RSP



## 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.

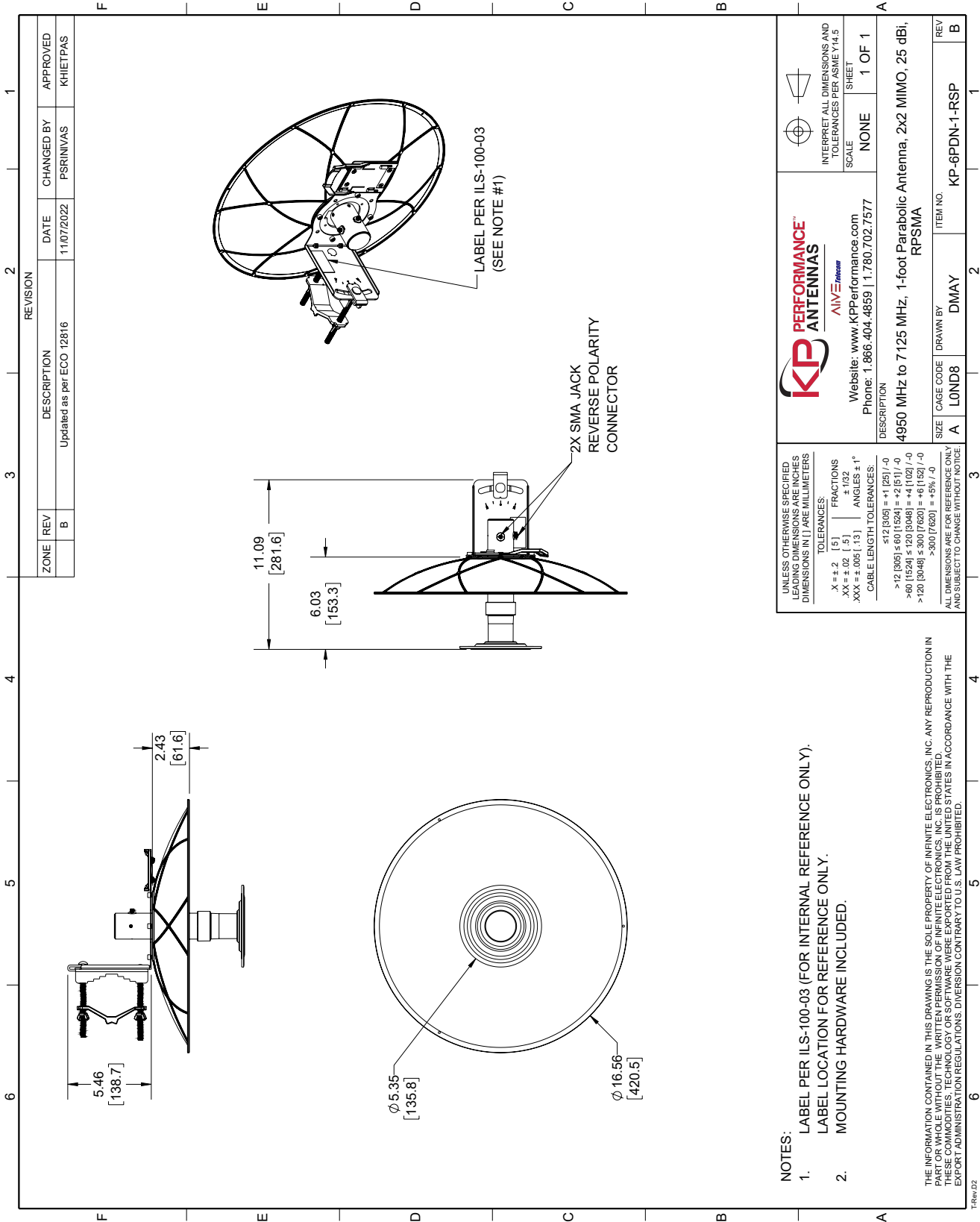
Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz,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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4950 MHz to 7125 MHz, 1-foot Parabolic Antenna, 2x2 MIMO, 25 dBi, RPSMA KP-6PDN-1-RSP](https://www.kpperformance.com/4950-mhz-to-7125-mhz-1-foot-parabolic-antenna-2x2-mimo-25-dbi-rpsma-kp-6pdn-1-rsp)

URL: <https://www.kpperformance.com/4950-mhz-to-7125-mhz-1-foot-parabolic-antenna-2x2-mimo-25-dbi-rpsma-kp-6pdn-1-rsp-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 implement 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-6PDN-1-RSP CAD Drawing



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	B	Updated as per ECO 12816	11/07/2022	PSRINIVAS	KHIETPAS

**KP PERFORMANCE ANTENNAS**  
 Website: www.KPperformance.com  
 Phone: 1.866.404.4859 | 1.780.702.7577

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X = ±.2 [5] FRACTIONS ±.132  
 .XX = ±.02 [5] ANGLES ±1°  
 .XXX = ±.005 [13] CABLE LENGTH TOLERANCES:  
 <math>\le 12 (305) = +1 (25) / -0</math>  
 <math>\le 12 (305) \le 60 (1524) = +2 (51) / -0</math>  
 <math>\le 60 (1524) \le 120 (3048) = +4 (102) / -0</math>  
 <math>\le 120 (3048) \le 300 (7620) = +6 (152) / -0</math>  
 <math>>300 (7620) = +5% / -0</math>

DESCRIPTION  
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SCALE NONE SHEET 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

REV B  
 CAGE CODE LOND8  
 DRAWN BY DMAY  
 ITEM NO. KP-6PDN-1-RSP

**NOTES:**

- LABEL PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY).
- LABEL LOCATION FOR REFERENCE ONLY. MOUNTING HARDWARE INCLUDED.

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