

# Antennas Engineered to Exceed

# 4.9-5.8 GHz 34 dBi Dual Polarity/X-Polarity MIMO Dish Antenna

## **KPPA-5PDN-3**

#### **Features**

- · Adjustable dual polarity feed horn system allows the antenna to be configured for Dual Polarization (horizontal and vertical) or for X-Polarization (+45° and -45°)
- Perforated aluminum reflector dish helps reduce wind loading and features a UV stable light gray polymer finish

#### Applications

- 5.1/5.3/5.4/5.8 GHz ISM and UNII Band Applications
- 4.9 GHz Public Safety Band
- MIMO and 802.11 n Applications

· WiMAX Applications · Long Distance Backhaul and Point to Point Data Links

• (2) N-Female connectors

Includes tilt and swivel mast mount kit

Optional radome cover kits available

#### Description

The HyperLink model KPPA-5PDN-3 is a high performance broadband dual polarized solid dish antenna. Because of its' superb electrical performance and mechanical stability, the parabolic dish antenna can be used in a wide variety of high performance 4.9GHz and 5GHz range (5.1/5.3/5.4/5.8GHz) wireless applications. The wide band design of this antenna eliminates the need to purchase different antennas for each frequency. This simplifies installations since the same antenna can be used for a wide array of wireless applications. This antenna features 31 - 34 dBi of gain with a 3.3° horizontal beam-width and 3.3° vertical beam-width.

The KPPA-5PDN-3 features an adjustable dual polarity feed horn system which allows the antenna to be configured for Dual Polarization (horizontal and vertical) or for X-Polarization (+45° and -45°). It is fed via two N-Female connectors, one for each polarized signals. This feature makes it ideal for MIMO/802.11n and polarization diversity systems.

The reflector dish of the KPPA-5PDN-3 is constructed from high quality aluminum which gives it superior strength. The dish is coated in a light gray UV-inhibited polymer for durability and aesthetics. Perforated holes in the dish helps minimize wind loading.

The KPPA-5PDN-3 is supplied with a tilt and swivel mast mount kit. This allows installation at various degrees of incline for easy alignment. It can be adjusted up or down from 0° to 30°.

For additional information and complete specifications, click on Data Sheet link in the Downloads sections.

#### Configuration

Design	Dish
Application Band	WLAN  MIMO  Public Safety
Band Type	Wide
Radiation Pattern	Directional
Polarization	H/V or 45 Deg. Slant
Connector Type	N Female
Number of Ports	2

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	4,750		5,850	MHz
Input VSWR			1.5:1	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 4.9-5.8 GHz 34 dBi Dual Polarity/X-Polarity MIMO Dish Antenna KPPA-5PDN-3



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## **KPPA-5PDN-3**



Impedance		50		Ohms
Gain		34		dBi
Front to Back Ratio	40			dB
Cross Polarization Ratio	30			dB
Horizontal (Azimuth) HPBW		3.3		Degrees
Vertical (Elevation) HPBW		3.3		Degrees
Input Power			100	Watts

#### Electrical Specification Notes:

Polarization is adjustable - Dual Polarizaed (Vertical and Horizontal) or X-Polarized (+45degree and -45degree Slant)

### **Mechanical Specifications**

Size	
Length	35.43 in [899.92 mm]
Width	35.43 in [899.92 mm]
Mounting Mast Diameter	1.6 to 3 in [40.64 to 76.20 mm]
Weight	21.16 lbs [9.6 kg]

### **Environmental Specifications**

#### **Plotted and Other Data**

Notes:

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## **KPPA-5PDN-3**



**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/4.9-5.8-ghz-34-dbi-dual-polarity-x-polarity-mimo-dish-antenna-kppa-5pdn-3-p.aspx

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### KPPA-5PDN-3 CAD Drawing

