

## 400 to 470 MHz, 3 dBi Exposed Dipole Antenna with N Female, Vertical Polarization, 1 Port, 1.5 VSWR

### **KP-400SPED-3-NF**



#### Features

- Frequency coverage for 400 MHz to 470 MHz with Type N Female connector and gain 3 dBi / 0.85 dBd antennas
- Multiple exposed dipoles can be mouted on a mast for best performance
- Feild adjustable radition patterns with 100W max input power per port

#### Applications

- Outdoor point-to-point (PtP) or point-to-multipoint (PtMP) applications
- UHF radio applications supported with Trunking for two-way radio communications
- Public Safety / Emergency services / Marine communications / Rail road communications

- · Easy and quick time to installations with U-Bolt mounts
- Industrially tuned folded dipole allows plug and play
- Weather and corrision free made of high-grade aluminum alloys
- Vertical Polarization
- Tetra and P-25 Applications exclusively supported
- Land Mobile Radio (LMR) and Private Mobile Radio (PMR)
- Fixed and mobile services for paging/voice/data in full duplex and half duplex mode

#### Description

The KP Performance KP-400SPED-3-NF 400 to 470 MHz, 3 dBi exposed dipole antenna, with N female connector is a low cost, high performance antenna designed for high power applications. With a frequency range of 400 to 470 MHz, this exposed dipole antenna is suitable for military communications, trunking, public safety, industrial communication, and amateur radio applications. The exposed dipole antenna's beamwidth can be adjusted according to applications by fixing dipoles at certain heights and directions. This high gain 3 dBi antenna transmits high power signals, increasing the signal strength, thus providing improved coverage, better broadcast control, and faster speed.

KP's KP-400SPED-3-NF exposed dipole antenna is a dipole stand-alone made of aluminum alloy, and thus packaging, transportation, and installation become easier. It has a 1.5 VSWR that results in the best power transfer and reduced losses. This 400 to 470 MHz VHF/UHF antenna is one of the simplest and most widely used antenna producing radiation patterns as that of an electric dipole. It comes with a threaded and weatherproof N female connector type which ensures a reliable physical connection and can be fixed on a pole using the U-bolt brackets that come with the antenna.

This exposed dipole antenna uses vertical polarization to transmit signals, thus reducing interference and performing better at lower heights. Our exposed dipole antenna has 1 port to connect an external circuit with 100W maximum input power per port. All components of this 3 dBi antenna are DC grounded for lightning protection, have a rugged outdoor design, and have a high-power handling capacity.

This antenna with a 3 dBi maximum gain is ideal for LMR, military, airports, construction, mining, commercial applications and radio users. This KP-400SPED-3-NF exposed dipole antenna from KP comes in compact packaging for lower shipping costs, is in stock and available for same-day shipping. For further information on similar products, our expert technical support and highly trained sales team can get you the perfect 400 to 470 MHz, 3 dBi exposed dipole antenna with a N female connector as per your requirement.

#### Configuration

Band Type Radiation Pattern Polarization Connector Type Number of Ports Single Omni Directional Vertical N Female

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 400 to 470 MHz, 3 dBi Exposed Dipole Antenna with N Female, Vertical Polarization, 1 Port, 1.5 VSWR KP-400SPED-3-NF



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### **KP-400SPED-3-NF**

Lightning Protection

DC Ground

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	400		470	MHz
Input VSWR			1.5:1	
Impedance		50		Ohms
Gain			3	dBi
Input Power			100	Watts

#### **Mechanical Specifications**

Radome Material	Aluminum Alloy
Size	
Length	12.5 in [317.5 mm]
Width	12 in [304.8 mm]
Height	2 in [50.8 mm]
Weight	14.08 lbs [6.39 kg]
Environmental Specifications Temperature	
Operating Range	-40 to +80 deg C

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

Notes:

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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:

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

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#### KP-400SPED-3-NF CAD Drawing

