

## 423 to 443 MHz, 8 dBi Omnidirectional Antenna with N Female, Vertical Polarization, 1 Port, 1.5 VSWR

### KP-380SPOMA-8-NF



#### Features

- Frequency coverage for 423 MHz to 443 MHz with Type N Female connector
- Moderate Gain 8 dBi / 5.85 dBd antennas
- Easy and quick time to installations
- Industrially tuned antenna allows plug and play
- Environmentally friendly strong fiberglass radome material
- Direct ground lightning protection
- 100 W max input power per port
- Vertical Polarization

#### 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
- 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-380SPOMA-8-NF 423 to 443 MHz, 8 dBi omnidirectional antenna, with N female connector is a low cost, high performance antenna designed for high power applications. With a frequency range of 380 to 470 MHz, this omnidirectional antenna is suitable for military communications, trunking, public safety, industrial communication, and amateur radio applications. This high gain 8 dBi antenna transmits high power signals, increasing the signal strength, thus providing improved coverage, better broadcast control, and faster speed.

KP's KP-380SPOMA-8-NF omnidirectional antenna is made of fiberglass, is omnidirectional and covers good bandwidth and range. It has a 1.5 VSWR that results in the best power transfer and reduced losses. This 423 to 443 MHz VHF/UHF antenna radiates equal power in all directions perpendicular to the axis, with power declining to zero on the axis, when graphed, radiation pattern describes a doughnut shape. It comes with a N female connector, which is a threaded and weatherproof that ensures a reliable physical connection.

This omnidirectional antenna uses vertical polarization to transmit signals, thus reducing interference and performing better at lower heights. Our omnidirectional antenna has 1 port to connect an external circuit with 100W maximum input power per port. All components of this 8 dBi antenna are DC grounded for lightning protection, have a rugged outdoor design, and have a high-power handling capacity .

This antenna with a 8 dBi maximum gain is ideal for LMR, military, airports, construction, mining, commercial applications and radio users. This KP-380SPOMA-8-NF omnidirectional 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 423 to 443 MHz, 8 dBi omnidirectional antenna with a N female connector as per your requirement.

#### Configuration

|                      |                  |
|----------------------|------------------|
| Band Type            | Single           |
| Radiation Pattern    | Omni Directional |
| Polarization         | Vertical         |
| Connector Type       | N Female         |
| Number of Ports      | 1                |
| Lightning Protection | DC Ground        |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[423 to 443 MHz, 8 dBi Omnidirectional Antenna with N Female, Vertical Polarization, 1 Port, 1.5 VSWR KP-380SPOMA-8-NF](#)

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**Electrical Specifications**

| Description     | Minimum | Typical | Maximum | Units |
|-----------------|---------|---------|---------|-------|
| Frequency Range | 423     |         | 443     | MHz   |
| Input VSWR      |         |         | 1.5:1   |       |
| Impedance       |         | 50      |         | Ohms  |
| Gain            |         |         | 8       | dBi   |
| Input Power     |         |         | 100     | Watts |

**Mechanical Specifications**

|                 |                     |
|-----------------|---------------------|
| Radome Material | Fiberglass          |
| <b>Size</b>     |                     |
| Length          | 2.5 in [63.5 mm]    |
| Width           | 1.2 in [30.48 mm]   |
| Height          | 1.2 in [30.48 mm]   |
| Weight          | 0.66 lbs [299.37 g] |

**Environmental Specifications**

|                    |                  |
|--------------------|------------------|
| <b>Temperature</b> |                  |
| 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 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-380SPOMA-8-NF CAD Drawing

