

400 MHz to 470 MHz Yagi Antenna, 10 dBi, Type N Female Connector, Pro-Series with Adjustable Polarization

KP-400SPY10



Features

- Aircraft Quality 6061-T6 Aluminum with 5/16" Elements Welded to a 1" Boom
- Powder-Coated Black for Corrosion, Fade, and Ice-Build Up Resistance
- Can be Installed for Either Vertical or Horizontal Polarization
- Comes with N-Type Female Connectors

Applications

- 400-470 MHz, Wireless Communications Systems
- LORA Wireless Data Collection Systems
- 450 MHz CDMA
- GMRS
- SCADA
- Family Radio Service 2-Way
- UHF Business Band

Description

The KP Performance KP-400SPY10 400 MHz to 470 MHz Yagi antenna is designed for the most rugged conditions and ships the same day. This 400 MHz antenna provides 10 dBi of gain and adjustable polarization. Equipped with an N-Female connector, coaxial connections to a radio are simple and easy. The KP-400SPY10 is ideally suited for 400 MHz and 450 MHz bands. This 10 dBi antenna supports Land Mobile Radio, Canadian border areas, Public Safety, Industrial and Business applications.

Measuring 38.4 inches long, the KP-400SPY10 with N-female connectors from KP Performance is manufactured using robust 5/16" aircraft quality aluminum elements. The KP-400SPY10 elements are completely welded to a 1" boom and painted black. This ensures performance and survivability in the toughest environments.

KP-400SPY10 Yagi Antenna from KP Performance operating from 400 MHz to 470 MHz can cover all your needs for Land Mobile Radio and Utilities communications.

KP Performance 10 dBi 400 MHz 38.4 inch Yagi antennas are high-quality components backed by expert technical support and sales personnel. The KP-400SPY10 is in stock and ready to ship the same day.

Configuration

Design	Yagi
Band Type	Dual
Radiation Pattern	Directional
Polarization	Adjustable
Connector Type	N Female
Number of Ports	1
Housing Material and Plating	Aluminum, Powder Coat

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	400		470	MHz
Input VSWR		1.7:1		
Impedance		50		Ohms
Gain		10		dBi
Input Power			100	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[400 MHz to 470 MHz Yagi Antenna, 10 dBi, Type N Female Connector, Pro-Series with Adjustable Polarization KP-400SPY10](#)

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Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	400-435	435-470				MHz
Gain	10	10.5				dBi
Horizontal HPBW	70	65				Degrees
Vertical HPBW	55	50				Degrees
Electrical Downtilt	2	2				Degrees
Front to Back Ratio	15	17				dB
VSWR Max	1.7:1					

Mechanical Specifications

Housing Material	Aluminum
Housing Plating/Color	Powder Coat
Size	
Length	38.4 in [975.36 mm]
Width	16.5 in [419.1 mm]
Height	2.4 in [60.96 mm]
Mounting Mast Diameter	0.75 to 3 in [19.05 to 76.20 mm]
Weight	6 lbs [2.72 kg]

Environmental Specifications

Temperature	
Operating Range	-40 to +60 deg C
Storage Range	-40 to +140 deg C
Wind Survivability	200 MPH [321.87 KPH]

Compliance Certifications (see [product page](#) for current document)

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 @ $180^{\circ} \pm 30^{\circ}$: Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over $\pm 30^{\circ}$ 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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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-400SPY10 CAD Drawing

