



## 2.4/ 5 GHz 11 dBi Dual Band / Polarized 2x2 Omni Antenna

### Antennas Technical Data Sheet

**PE510M1011**

#### Features

- MIMO - Multiple-Input and Multiple-Output
- Dual polarity/dual frequency feed system in single enclosure
- Separate inputs horizontal and vertical polarization
- UV-Resistant radome for all-weather operation
- Heavy duty industrial grade design

#### Applications

- 2.4/5 GHz IEEE 802.11a/b/g and 802.11ac applications
- Supports 1x2 and 2x2 MIMO AP/Routers
- WiMax, WISP and WiFi applications
- Wireless video systems
- Point-to-multipoint applications

#### Description

The HyperLink PE510M1011 is a professional high gain dual band/dual polarity omnidirectional base station antenna designed and optimized for 2.4 and 5 GHz frequencies. This antenna is ideally suited for multipoint applications where long range and wide coverage is desired.

The PE510M1011 is actually two antennas in one, a 2.4/5 GHz horizontal polarized antenna and a 2.4/5 GHz vertical polarized antenna together in a single radome. Each polarization features separate dual band feeds, two N-Female connectors in total. This antenna incorporates advanced dual polarization technology that allows for the interoperability of two radio transmit and receive paths. This technology allows for the attenuation of unwanted signals from adjacent channels and/or co-located equipment.

The PE510M1011 construction features a heavy-duty UV resistant PVCs radome for durability and aesthetics. Designed to operate in the harshest of environments, the PE510M1011 far exceeds other omnidirectional antennas. The included mounting system features twin heavy-duty mounting clamps and bolts for superior strength.

#### Configuration

Design	Omni
Band Type	Multi
Radiation Pattern	Omni Directional
Polarization	Vertical/Horizontal
Connector Type	N Female
Interface 2	N Female
Number of Ports	2
Lightning Protection	DC Ground

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	2,400		5,800	MHz
Impedance		50		Ohms
Isolation	28			dB
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: [2.4/ 5 GHz 11 dBi Dual Band / Polarized 2x2 Omni Antenna PE510M1011](#)



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**Specifications by Band**

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	2.4 to 2.5	5.1 to 5.8				GHz
Gain	6	11				dBi
Horizontal Beam Width	360	360				Degrees
Vertical Beam Width	25	6.5				Degrees
VSWR Max	1.6:1	1.9:1				
Maximum Input Power	100	100				Watts

**Mechanical Specifications**

Radome Material	PVC
<b>Size</b>	
Overall Length	49.2 in [124.97 cm]
Width	2.9 in [73.66 mm]
Height	2.9 in [73.66 mm]
Mounting Mast Diameter	1.6 to 3.5 in [40.64 to 88.90 mm]
Weight	8.2 lbs [3.72 kg]
Mechanical Specification Notes: Radome material is UV-resistant PVC.	

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-40 to +60 deg C
Wind Loading	130 MPH [209.21 KPH]

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

**Plotted and Other Data**

Notes:

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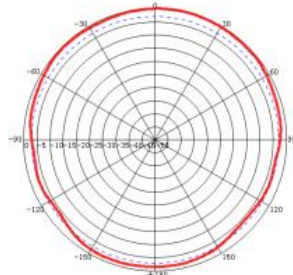
2.4/ 5 GHz 11 dBi Dual Band / Polarized 2x2 Omni Antenna

**Antennas Technical Data Sheet**

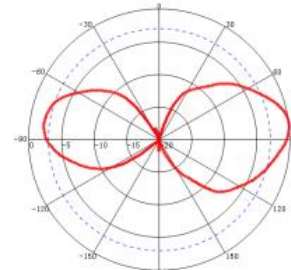
**PE510M1011**

**RF Antenna Patterns**

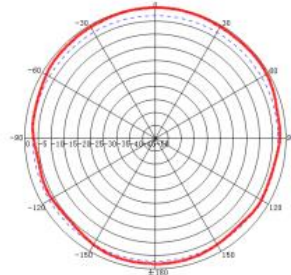
**Horizontal Polarization**



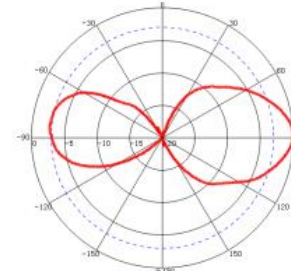
**H-Plane: 2400 MHz**



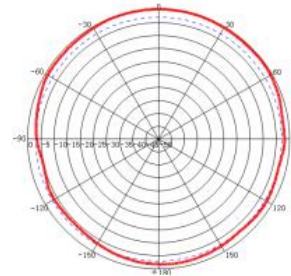
**V-Plane: 2400 MHz**



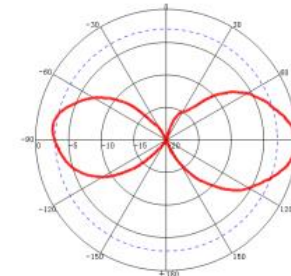
**H-Plane: 2450 MHz**



**V-Plane: 2450 MHz**



**H-Plane: 2500 MHz**



**V-Plane: 2500 MHz**

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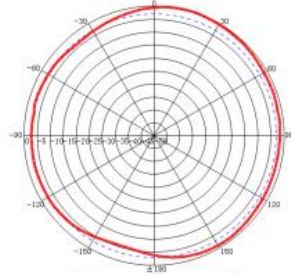


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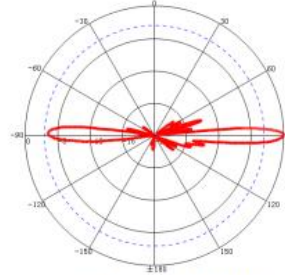
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**PE510M1011**

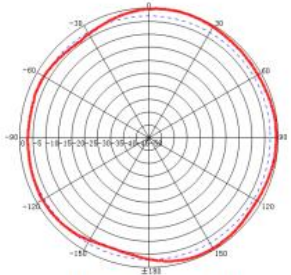
**Horizontal Polarization**



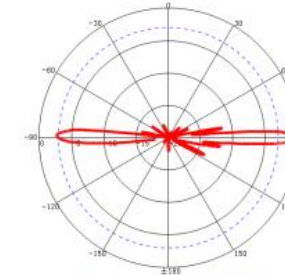
**H-Plane: 5100 MHz**



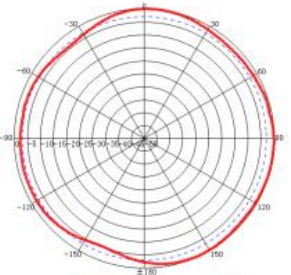
**V-Plane: 5100 MHz**



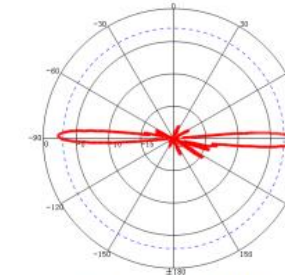
**H-Plane: 5500 MHz**



**V-Plane: 5500 MHz**



**H-Plane: 5800 MHz**



**V-Plane: 5800 MHz**

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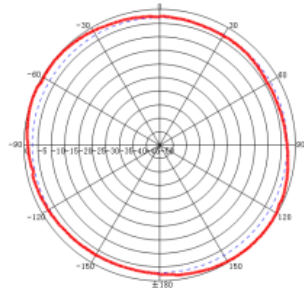


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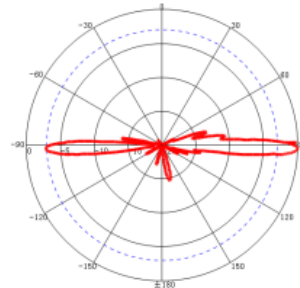
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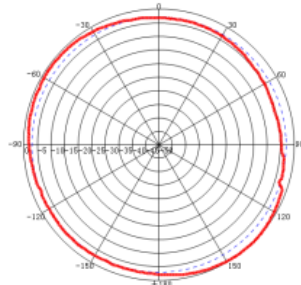
**Vertical Polarization**



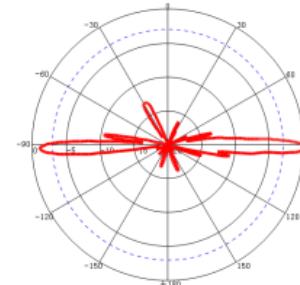
**H-Plane: 5100 MHz**



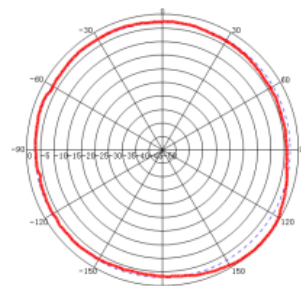
**V-Plane: 5100 MHz**



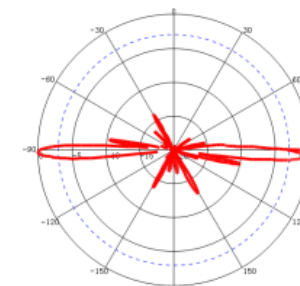
**H-Plane: 5500 MHz**



**V-Plane: 5500 MHz**



**H-Plane: 5800 MHz**



**V-Plane: 5800 MHz**

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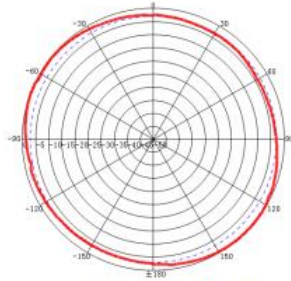


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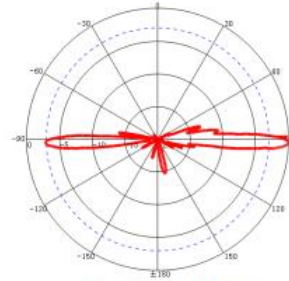
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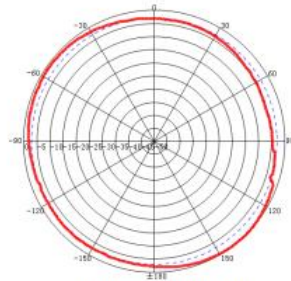
**Vertical Polarization**



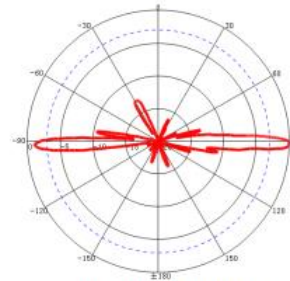
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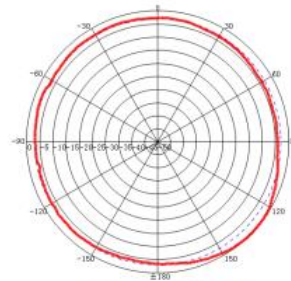
**V-Plane: 5100 MHz**



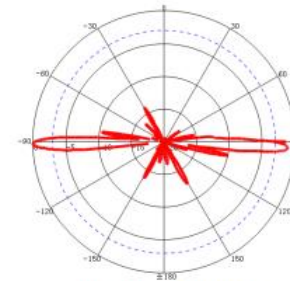
**H-Plane: 5500 MHz**



**V-Plane: 5500 MHz**



**H-Plane: 5800 MHz**



**V-Plane: 5800 MHz**

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## 2.4/ 5 GHz 11 dBi Dual Band / Polarized 2x2 Omni Antenna

### Antennas Technical Data Sheet

**PE51OM1011**

2.4/ 5 GHz 11 dBi Dual Band / Polarized 2x2 Omni Antenna from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4/ 5 GHz 11 dBi Dual Band / Polarized 2x2 Omni Antenna PE51OM1011](https://www.pasternack.com/multi-antenna-0-dbi-gain-n-pe51om1011-p.aspx)

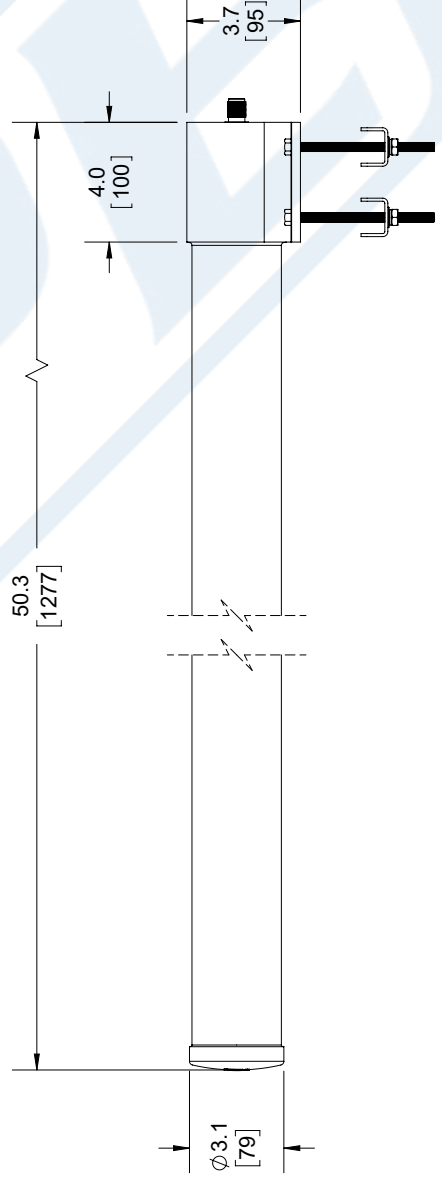
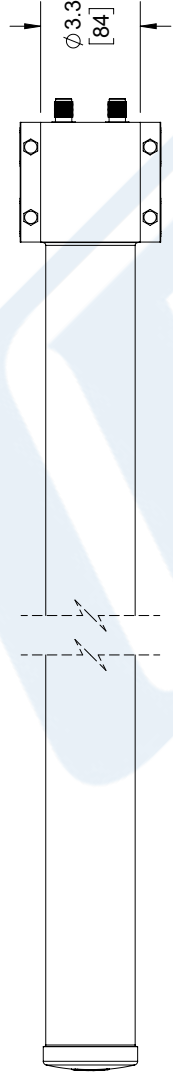
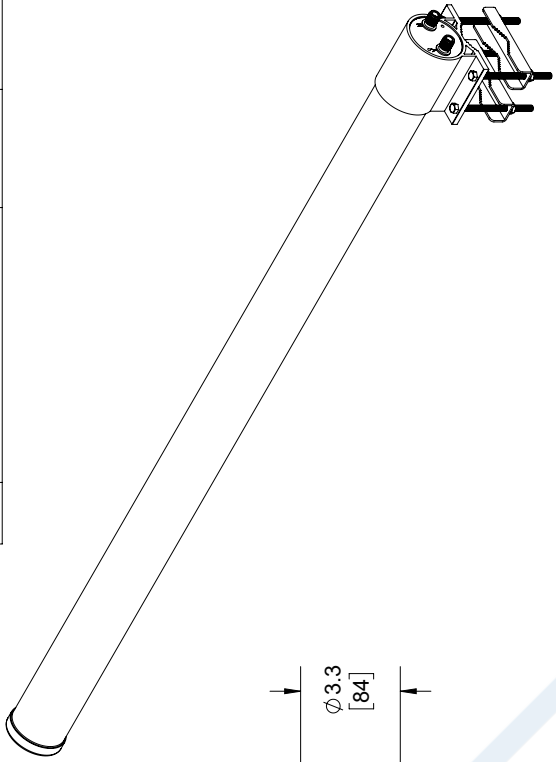
URL: <https://www.pasternack.com/multi-antenna-0-dbi-gain-n-pe51om1011-p.aspx>

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# PE510M1011 CAD Drawing

## 2.4/ 5 GHz 11 dBi Dual Band / Polarized 2x2 Omni Antenna

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/13/2020	M.MILLER



N-FEMALE CONNECTOR (2X)

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

**TOLERANCES:**

.X = ±.2 [5.08]	FRACTIONS ± 1/32
.XX = ±.02 [.51]	ANGLES ± 1°
.XXX = ±.005 [.13]	

**CABLE LENGTH (L) TOLERANCES:**

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5% / L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

**THIRD-ANGLE PROJECTION**

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SHEET 1 OF 1

SCALE N/A

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 Website: www.pasternack.com  
 E-mail: sales@pasternack.com

SIZE	CAGE CODE	DRAWN BY	ITEM NO
A	53919	K.DANG	PE510M1011
REV			A

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 EU ROHS DIRECTIVE (MOST RECENT RELEASED VERSION)

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