



6-6 dBi Omni Antenna 2.4-2.5 GHz, 5.1-5.8 GHz, N Type
Female PVC Radome, 1.6:1 Max VSWR, 2 Port

Antennas Technical Data Sheet

PE510M1010

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 PE510M1010 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 PE510M1010 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 PE510M1010 construction features a heavy-duty UV resistant PVCs radome for durability and aesthetics. Designed to operate in the harshest of environments, the PE510M1010 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	Dual
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
Input VSWR			1.6:1	
Impedance		50		Ohms
Isolation	28			dB
Input Power			100	Watts

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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	6				dBi
Horizontal Beam Width	360	28				Degrees
Vertical Beam Width	28	28				Degrees
VSWR Max	1.6:1	1.9:1				
Maximum Input Power	100	100				Watts

Mechanical Specifications

Radome Material	PVC
Size	
Radome Diameter	2.9 in [73.66 mm]
Overall Length	40.6 in [103.12 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	7 lbs [3.18 kg]
Mechanical Specification Notes: Radome material is UV resistant PVC.	

Environmental Specifications

Temperature	
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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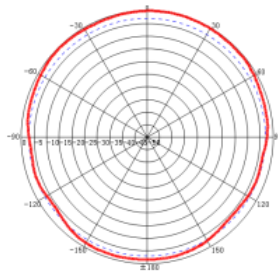
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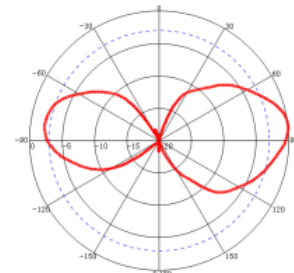
PE510M1010

RF Antenna Patterns

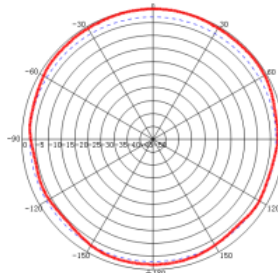
Horizontal Polarization



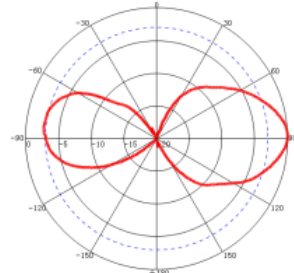
H-Plane: 2400 MHz



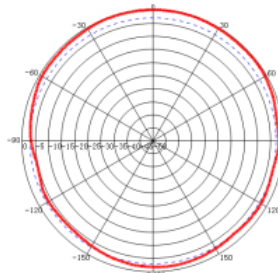
V-Plane: 2400 MHz



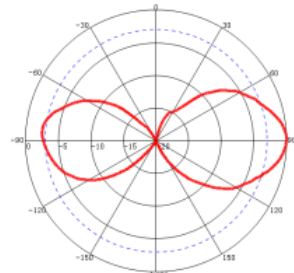
H-Plane: 2450 MHz



V-Plane: 2450 MHz



H-Plane: 2500 MHz



V-Plane: 2500 MHz

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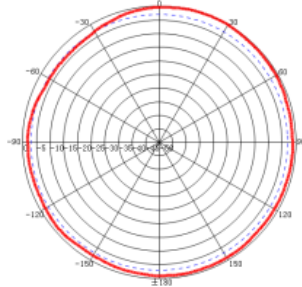
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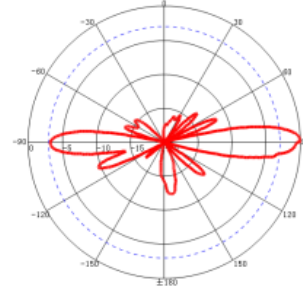
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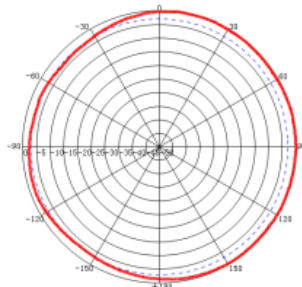
Horizontal Polarization



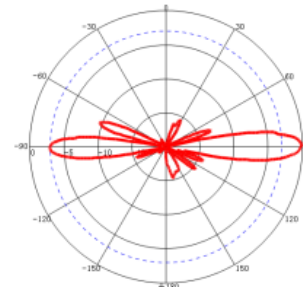
H-Plane: 5100 MHz



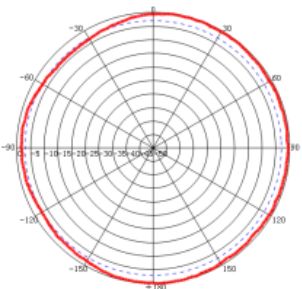
V-Plane: 5100 MHz



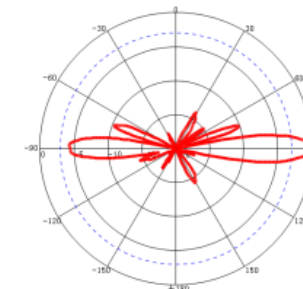
H-Plane: 5500 MHz



V-Plane: 5500 MHz



H-Plane: 5800 MHz



V-Plane: 5800 MHz

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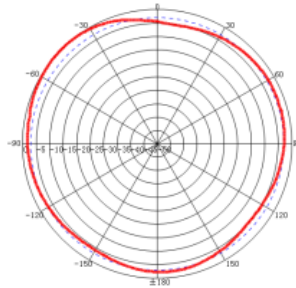


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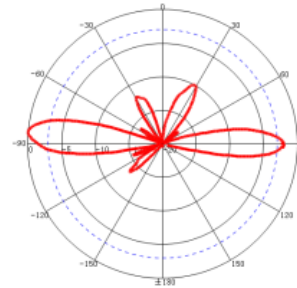
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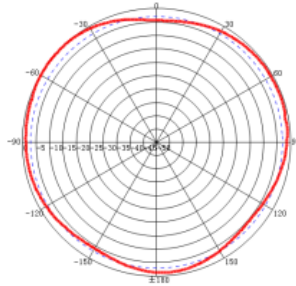
Vertical Polarization



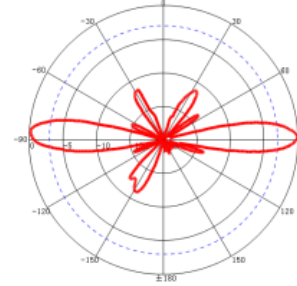
H-Plane: 5100 MHz



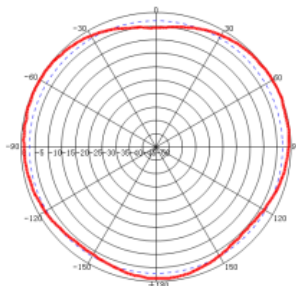
V-Plane: 5100 MHz



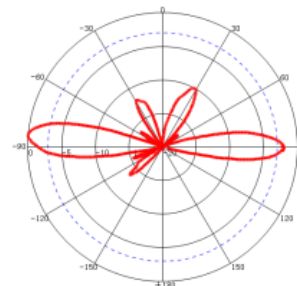
H-Plane: 5500 MHz



V-Plane: 5500 MHz



H-Plane: 5800 MHz



V-Plane: 5800 MHz

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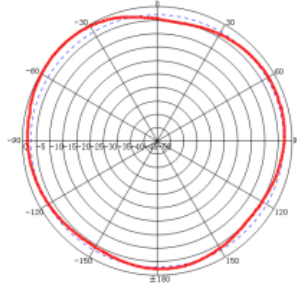


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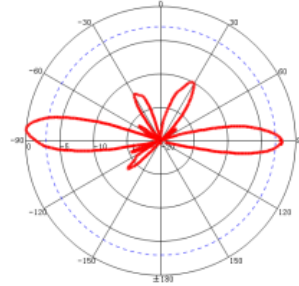
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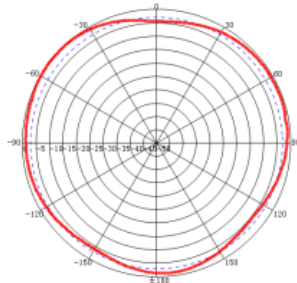
Vertical Polarization



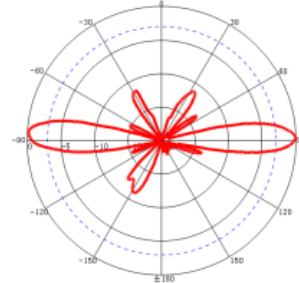
H-Plane: 5100 MHz



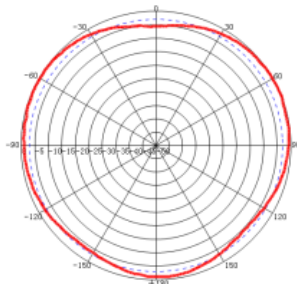
V-Plane: 5100 MHz



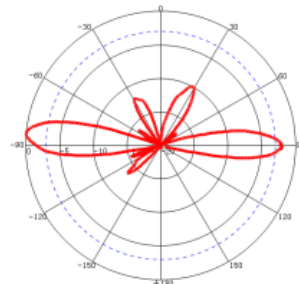
H-Plane: 5500 MHz



V-Plane: 5500 MHz



H-Plane: 5800 MHz



V-Plane: 5800 MHz

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PE51OM1010

6-6 dBi Omni Antenna 2.4-2.5 GHz, 5.1-5.8 GHz, N Type Female PVC Radome, 1.6:1 Max VSWR, 2 Port 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.

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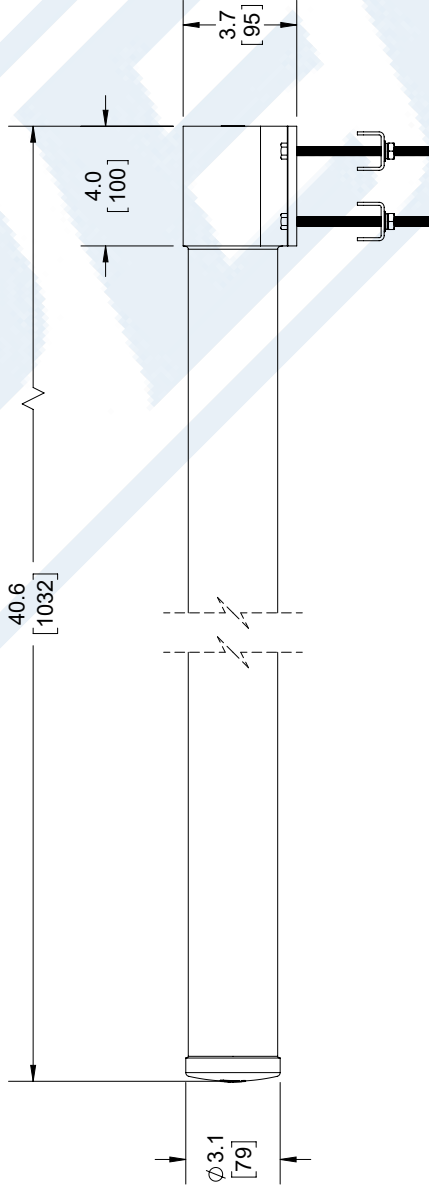
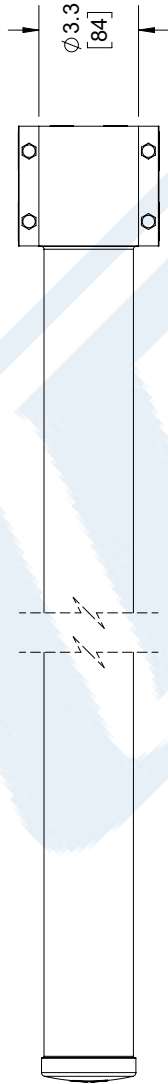
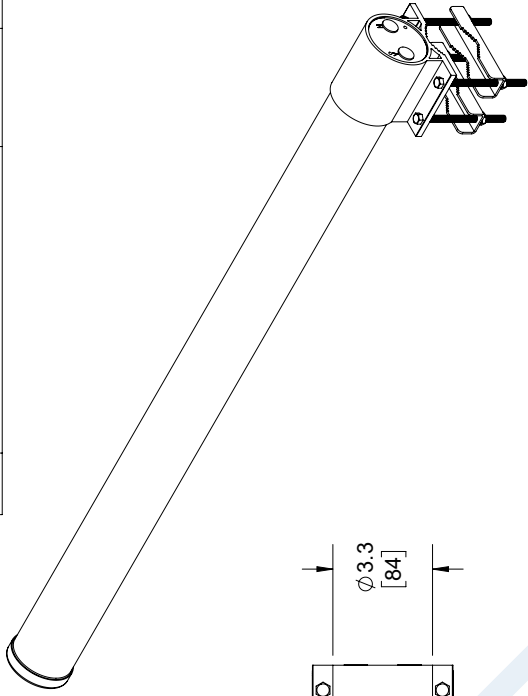
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PE51OM1010 CAD Drawing

6-6 dBi Omni Antenna 2.4-2.5 GHz, 5.1-5.8 GHz, N Type
Female PVC Radome, 1.6:1 Max VSWR, 2 Port

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	PCR PE51OM1010 20220901	9/30/2022	KHIETPAS



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	±.9% 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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E-mail: sales@pasternack.com

SIZE	CAGE CODE	DRAWN BY	ITEM NO
A	53919	K.DANG	PE51OM1010
REV			B

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EU ROHS DIRECTIVE (MOST RECENT RELEASED VERSION)

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