

HyperLink Wireless 2.4/4.9-5.8 GHz 90° Dual Band/Dual Polarized Sector Antenna Model: HG2458-15DP-090

Applications

- 802.11a, 802.11b, 802.11g 802.11n and 802.11ac access points and routers
- WiMAX, WISP and WiFi applications
- Supports 1x2 and 2x2 MIMO AP/Routers
- Homeland Security and Public Safety Services: Fire, Police, Security
- Wireless Internet Provider "cell" sites

Features

- MIMO – Multiple-Input and Multiple-Output
- Dual polarity/dual frequency feed system in single enclosure
- Separate inputs horizontal and vertical polarization
- (2) N-Female connectors
- 10° down-tilt mast mounting bracket and hardware



Description

The HyperLink HG2458-15DP-090 is a high performance dual-band / dual polarized sector panel antenna, which combines high gain with a beamwidth up to 90°. Its dual-band design makes it suitable for applications in the 2.4GHz (2400-2500 MHz) and 5 GHz (4900-5850 MHz) band which and eliminates the need to purchase different antennas for each frequency. This simplifies installations since the same antenna can be used for a wide array of wireless applications.

Dual Frequency / Dual Polarized

The HG2458-15DP-090 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.



This dual-band / dual polarized sector antenna features a heavy-duty fiberglass radome for all-weather operation. The heavy-duty mounting system allows installation adjusts from 0 to 10 degrees down tilt.

Specifications

Electrical Specifications

Frequency Range	2400 - 2500 MHz / 4900 - 5850 MHz	
Polarization	Vertical and Horizontal	
Gain	2400 - 2500 MHz	13 dBi
	4900 - 5850 MHz	15 dBi
Horizontal Beam Width (-3 dB)	2400 - 2500 MHz (H Pol)	90°
	4900 - 5850 MHz (H Pol)	85°
	2400 - 2500 MHz (V Pol)	90°
	4900 - 5850 MHz (V Pol)	85°
Vertical Beam Width (-3 dB)	2400 - 2500 MHz (H Pol)	16°
	4900 - 5850 MHz (H Pol)	10°
	2400 - 2500 MHz (V Pol)	14°
	4900 - 5850 MHz (V Pol)	11°
Impedance	50 Ohm	
VSWR	2400 - 2500 MHz (H/V Pol)	< 1.5
	4900 - 5850 MHz (H/V Pol)	Typ. < 2.0
Front to Back Ratio	> 16 dB	
Max. Input Power	100 Watts	
Isolation	> 28 dB	

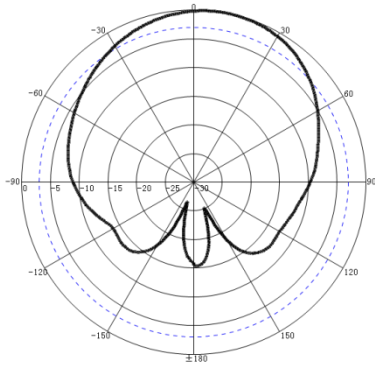
Mechanical Specifications

Connectors	(2) Integral N-Female
Weight	12.1 lbs. (5.5 kg)
Dimensions	61.8 x 6.3 x 3.2 in (1570 x 160 x 81 mm)
Radome Material	UV-inhibited Fiberglass
Mounting	1.2 – 2.0 in (30 – 50 mm) dia. mast max.
Operating Temperature	-40° C to 60° C (-40° F to 140° F)
Rated Wind	>130 MPH (210 Km/h)
RoHS Compliant	Yes

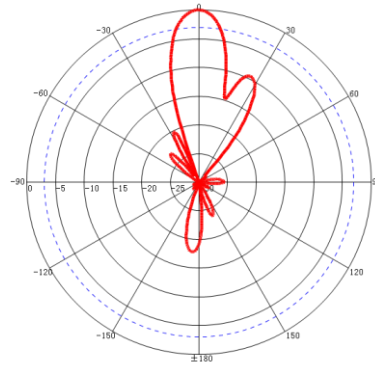
Wind Loading Data

Wind Speed (MPH)	Loading
100	138 lb.
125	216 lb.

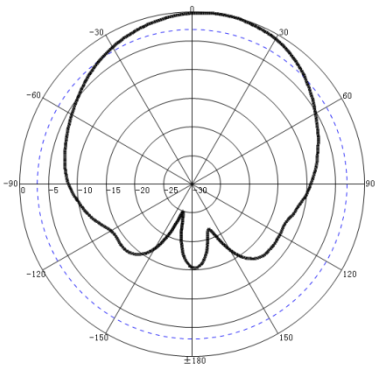
Horizontal Antenna Patterns



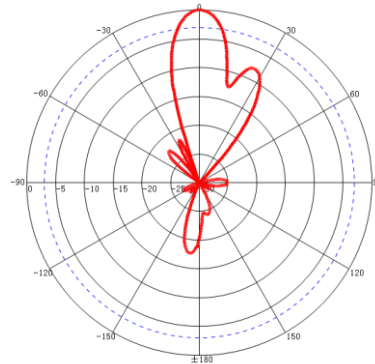
H-Plane: 2400 MHz



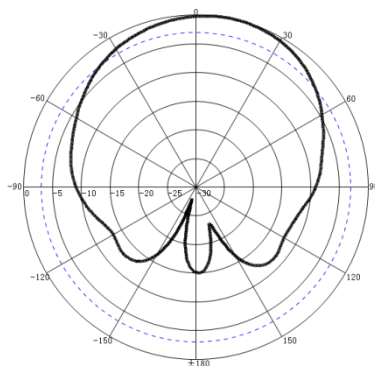
V-Plane: 2400 MHz



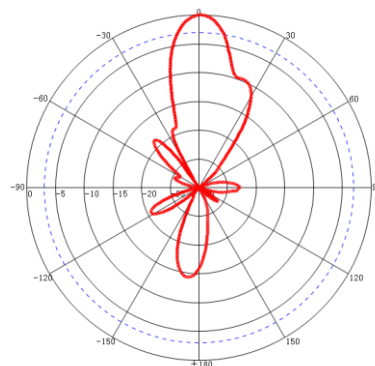
H-Plane: 2450 MHz



V-Plane: 2450 MHz



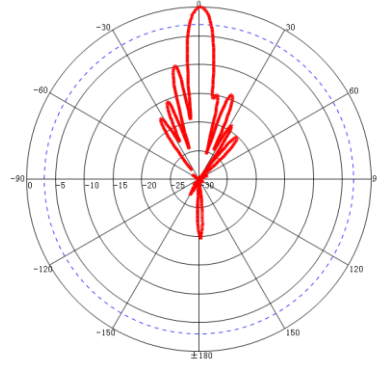
H-Plane: 2500 MHz



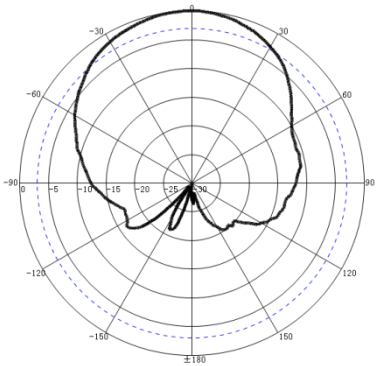
V-Plane: 2500 MHz



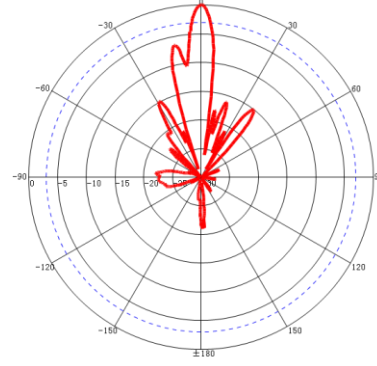
H-Plane: 4900 MHz



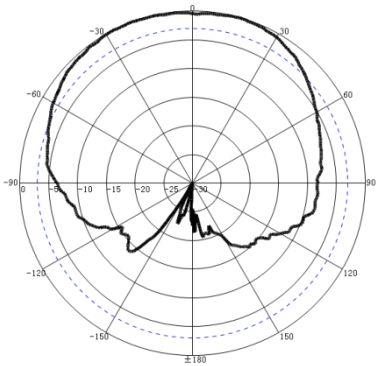
V-Plane: 4900 MHz



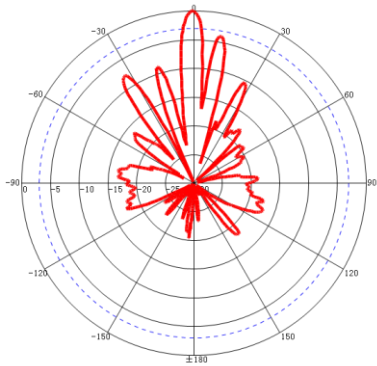
H-Plane: 5375 MHz



V-Plane: 5375 MHz

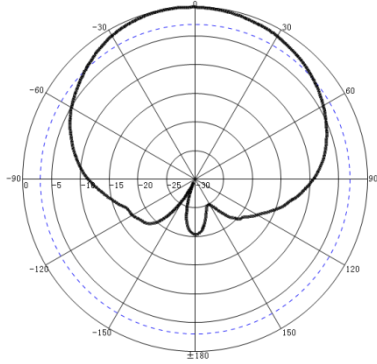


H-Plane: 5850 MHz

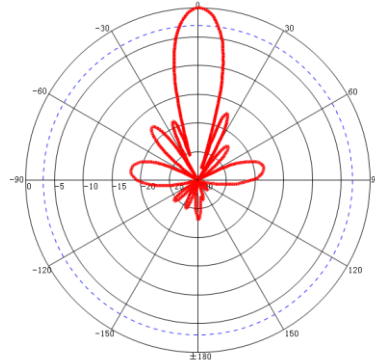


V-Plane: 5850 MHz

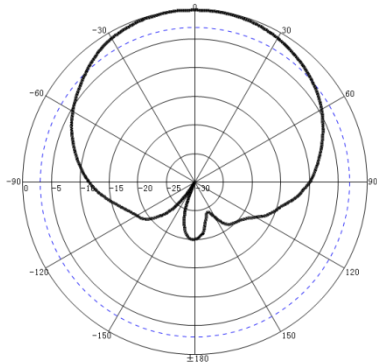
Vertical Antenna Patterns



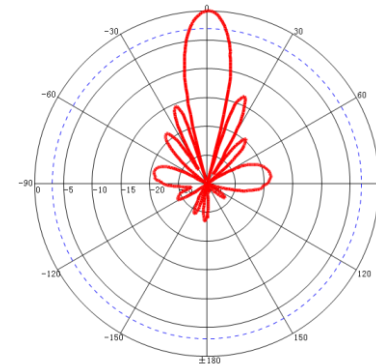
H-Plane: 2400 MHz



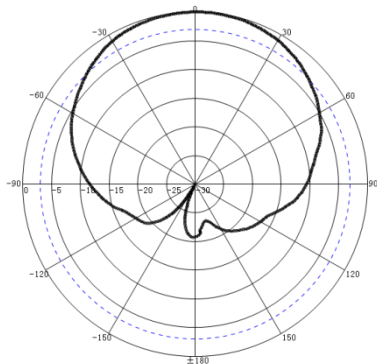
V-Plane: 2400 MHz



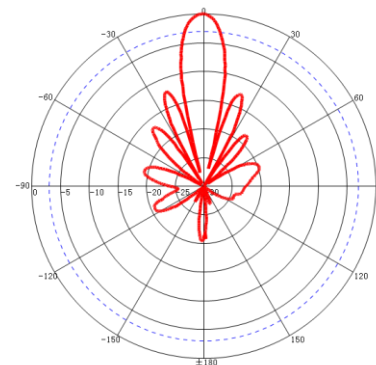
H-Plane: 2450 MHz



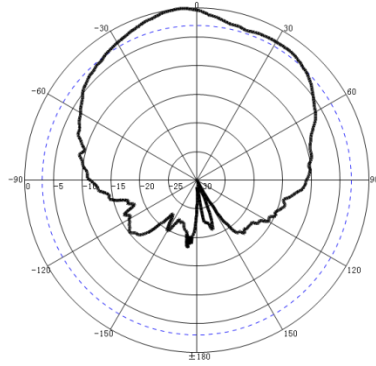
V-Plane: 2450 MHz



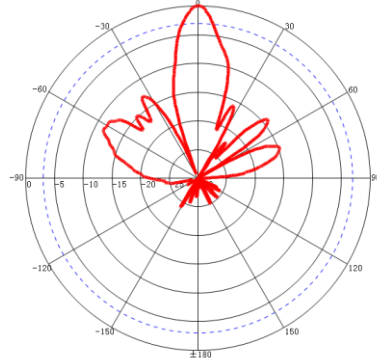
H-Plane: 2500 MHz



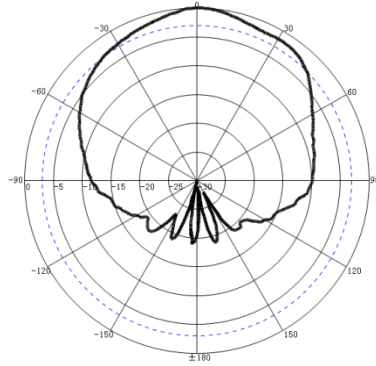
V-Plane: 2500 MHz



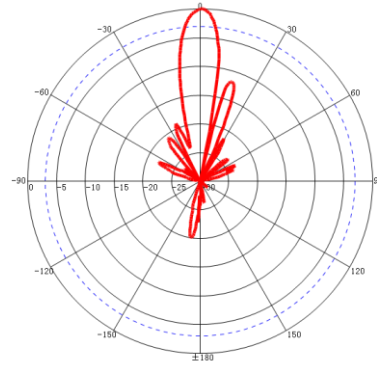
H-Plane: 4900 MHz



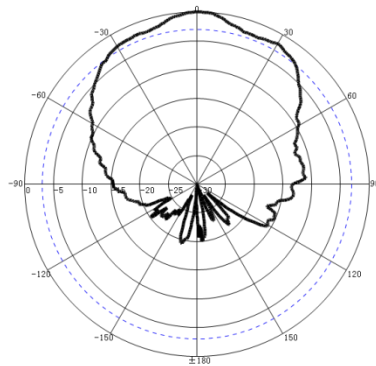
V-Plane : 4900 MHz



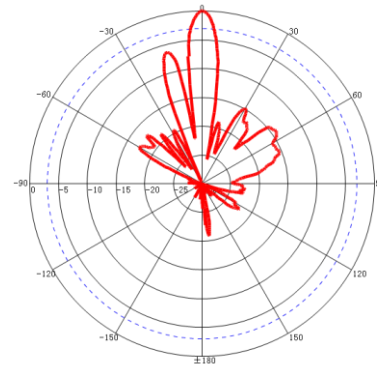
H-Plane: 5375 MHz



V-Plane: 5375 MHz



H-Plane: 5850 MHz



V-Plane: 5850 MHz