HyperLink Wireless High Density 2.4/5 GHz Four Element Dual Polarized Flat Panel Antenna Model: HG2458-13HDP-4NF

Features

- Four independent antennas, two vertical and two horizontal
- Narrow beamwidth for high density applications
- MIMO – Multiple-Input and Multiple-Output
- Dual polarity feed system in single enclosure
- Dual band, high gain operation

Applications

- 2.4/4.9-5.8 GHz Indoor/Outdoor Wireless LAN systems
- Supports IEEE 802.11 a/b/g/n and 802.11ac
- Homeland Security and Public Safety Band
- Large stadiums, convention centers and city centers
- Business and educational campuses

Description

The HyperLink HG2458-13HDP-4NF High Density Flat Panel Antenna combines four dual band antennas in a single housing. The unit consists of two vertically and two horizontally polarized multi-patch antennas. It is a professional quality antenna designed primarily for MIMO point-to-multipoint and point-to-point applications in the 2.4 GHz and the 4.9-5.8 GHz frequency bands. The unit can be used with APs and Routers with one to four antenna ports.

Dual Polarized

This antenna incorporates advanced dual polarization technology that allows for the interoperability of two radios to transmit and receive paths. This technology allows for the attenuation of unwanted signals from adjacent channels and/or co-located equipment.

High Density

By using a narrow more focused beamwidth, the HG2458-13HDP-4NF minimizes channel-to-channel interference which helps improve coverage and provides greater capacity. The narrow beamwidth of the HG2458-13HDP-4NF allows it to be precisely positioned directly where needed thus reducing RF interference. In addition, the high gain of the HG2458-13HDP-4NF allow for greater distance between the antenna and the users.

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Rugged and Weatherproof

This aesthetically pleasing antenna features a heavy-duty UV-resistant plastic radome ideal for all-weather indoor and outdoor operation. The HG2458-13HDP-4NF antenna is supplied with a tilt and swivel mast mount kit. This allows quick installation at various degrees of up/down tilt for easy alignment.

Specifications

Electrical Specifications

Frequency Range	2400-2500 / 4900-5850 MHz	
Gain	11 dBi (2.4 GHz)	
	13 dBi (5 GHz)	
Polarization	Vertical (2x) and Horizontal (2x)	
Horizontal Beamwidth	2400-2500 MHz (H Pol)	44°
	4900-5850 MHz (H Pol)	26°
	2400-2500 MHz (V Pol)	47°
	4900-5850 MHz (V Pol)	24°
Vertical Beamwidth	2400-2500 MHz (H Pol)	44°
	4900-5850 MHz (H Pol)	23°
	2400-2500 MHz (V Pol)	43°
	4900-5850 MHz (V Pol)	24°
F/B Ratio	> 24 dB	
Isolation	2400-2500 MHz	< -35 dB
	4900-5850 MHz	< -32 dB
VSWR	< 2.0	
Max. Input Power	50 watts	
Input Impedance	50 Ohm	

Mechanical Specifications

Connector Interface	N-Female (4x)
Radome Material	Gray ASA
Rated Wind Velocity	130mph (210km/h)
Operating Temperature	-40° C to 85° C (-40° F to 185° F)
Dimensions	12.4 x 12.4 x 1.0 in. (315 x 315 x 26 mm)
Weight	3.3 lbs (1.5 kg including the bracket)
Mounting Mast Size (Dia.)	0.75–2.00 in. (19-50 mm)
RoHS Compliant	Yes

Wind Loading Data

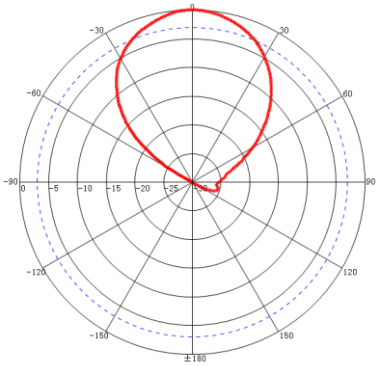
Wind Speed (MPH)	Loading
100	54 lbs.
125	85 lbs.

RF Antenna Patterns – H-Pol

H-Plane: 2400 MHz

V-Plane: 2400 MHz

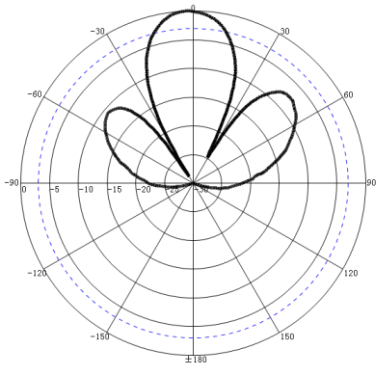
H-Plane: 2450 MHz



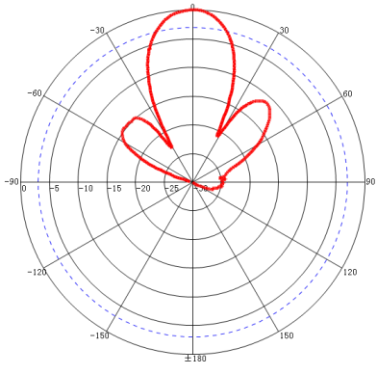
V-Plane: 2450 MHz

H-Plane: 2500 MHz

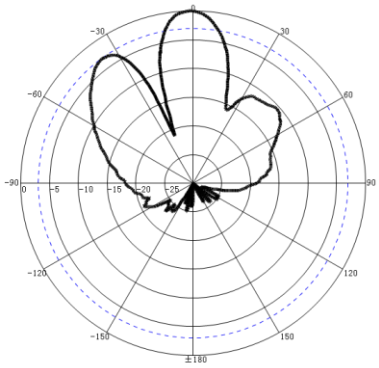
V-Plane: 2500 MHz



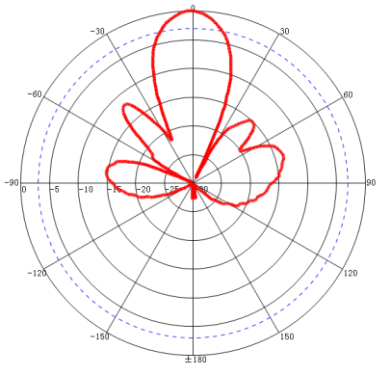
H-Plane: 4900 MHz



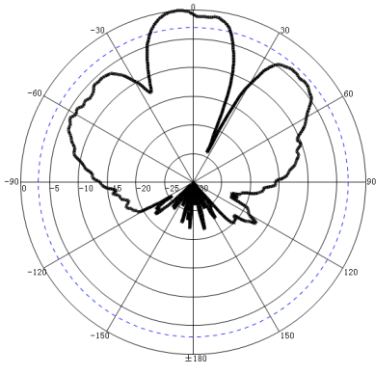
V-Plane: 4900 MHz



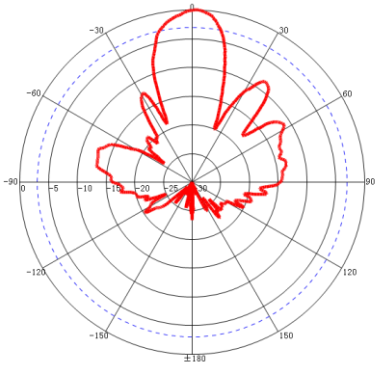
H-Plane: 5400 MHz



V-Plane: 5400 MHz



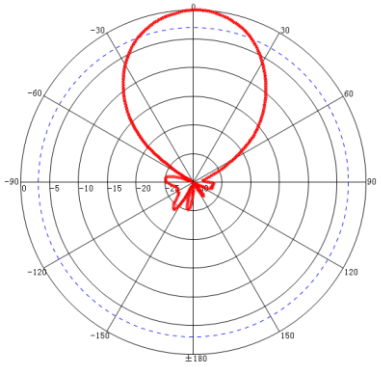
H-Plane: 5850 MHz



V-Plane: 5850 MHz

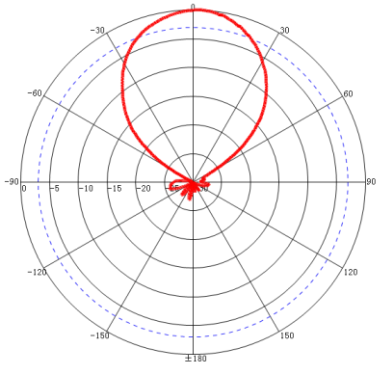
RF Antenna Patterns – V-Pol

H-Plane: 2400 MHz



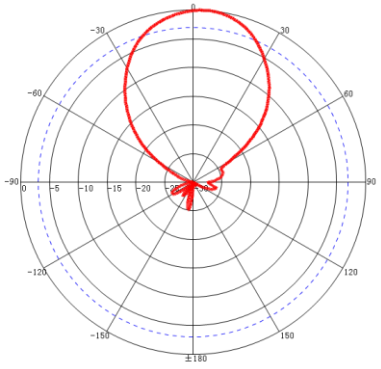
V-Plane: 2400 MHz

H-Plane: 2450 MHz

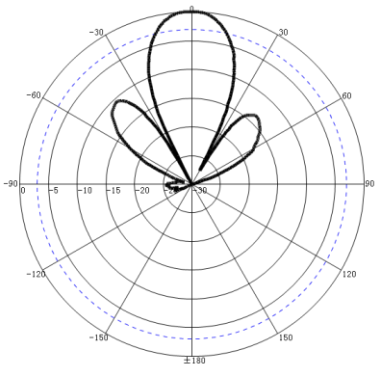


V-Plane: 2450 MHz

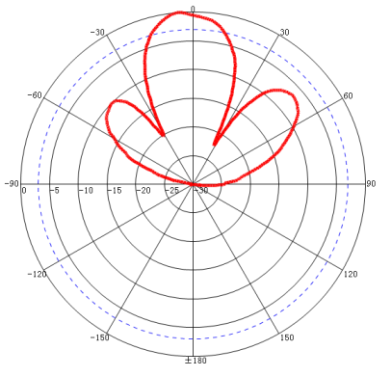
H-Plane: 2500 MHz



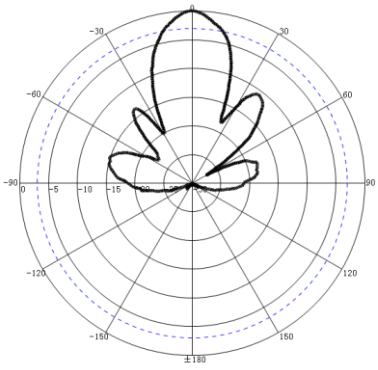
V-Plane: 2500 MHz



H-Plane: 4900 MHz



V-Plane: 4900 MHz



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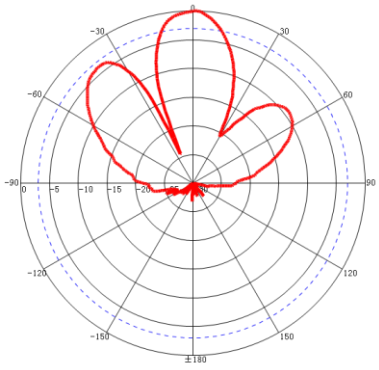
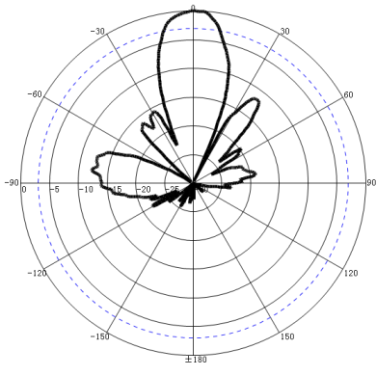
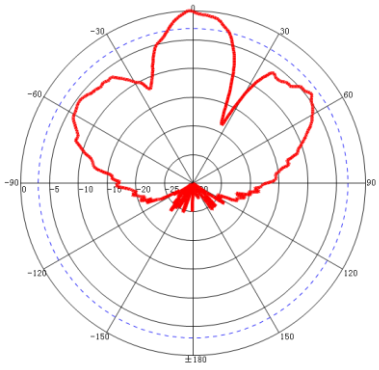


V-Plane: 5400 MHz



H-Plane: 5850 MHz



V-Plane: 5850 MHz

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