

HyperLink Wireless 2.4/4.9-5.8 GHz Six Element Dual Polarized Flat Panel Antenna Model: HG2458-10DP-6NF

Features

- Six independent antennas
- MIMO – Multiple-Input and Multiple-Output
- Dual polarity feed system in single enclosure
- Dual band, high gain operation
- Four vertical and two horizontal elements
- UV-resistant radome for all-weather operation



Applications

- 2.4/4.9-5.8 GHz Indoor/Outdoor Wireless LAN systems
- MIMO wireless access points and routers
- Supports IEEE 802.11 a/b/g/n and 802.11ac applications
- Homeland Security and Public Safety Band
- Hospitality, Industrial, Municipality

Description

Superior Performance

The HyperLink HG2458-10DP-6NF Flat Panel Antenna combines six dual band antennas in a single housing. The unit consists of four 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 six antenna ports.

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.

Rugged and Weatherproof

This aesthetically pleasing antenna features a heavy-duty UV-resistant plastic radome ideal for all-weather indoor and outdoor operation. The HG2458-10DP-6NF 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

Mechanical Specifications

Connector Interface	N-Female (6x)
Radome Material	Gray ASA
Rated Wind Velocity	130mph (210km/h)
Operating Temperature	-40° C to 85° C (-40° F to 185° F)
Dimensions	12.40" x12.40"x0.98" (315x315x25mm)
Weight	3.5 lbs (1.6 kg including the bracket)
Mounting Mast Size (Dia.)	0.75-2.00 in. (19-50 mm)
RoHS Compliant	Yes

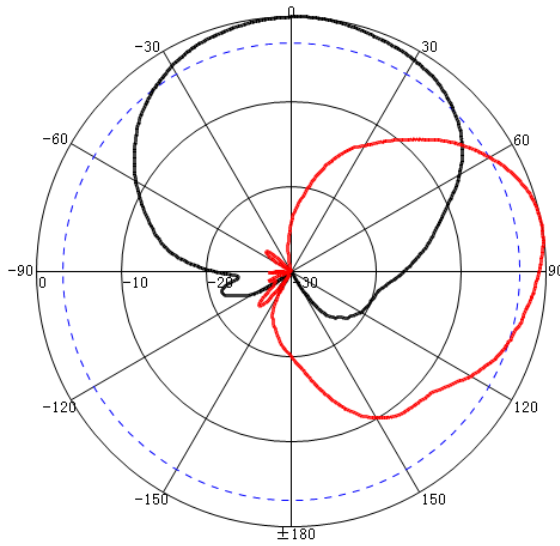
Electrical Specifications

Frequency Range	2400-2500 / 4900-5850 MHz
Gain	9 dBi (2.4 GHz) / 10 dBi (5 GHz)
Polarization	Vertical (4x) and Horizontal (2x)
VSWR	≤ 2.0
Horizontal Beamwidth	85° (2.4 GHz) / 50° (5 GHz)
Vertical Beamwidth	55° (2.4 GHz) / 45° (5 GHz)
F/B Ratio	26 dB (2.4 GHz) / 23 dB (5 GHz)
Cross-pol Isolation	< -28dB
Max. Input Power	25 watts
Lightning Protection	DC Ground
Input Impedance	50 Ohm

Wind Loading Data

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

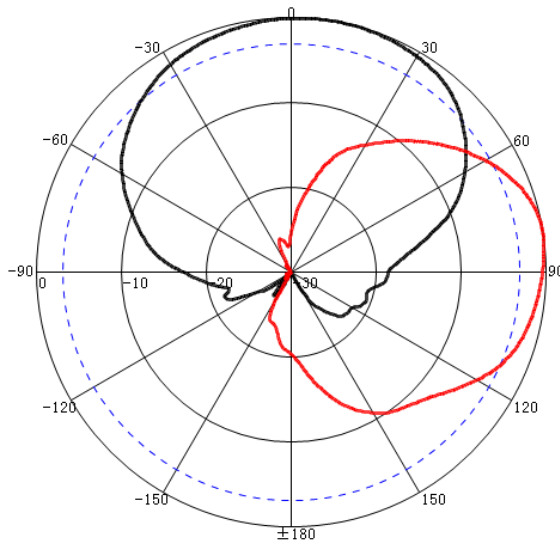
RF Antenna Patterns – V-Pol



Freq:2400MHz
Date:2014-03-14
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-20.59dB
HPBW(3dB):81.09°
FBR:27.51dB

Freq:2400MHz
Date:2014-03-14
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-18.79dB
HPBW(3dB):46.92°
FBR:26.85dB

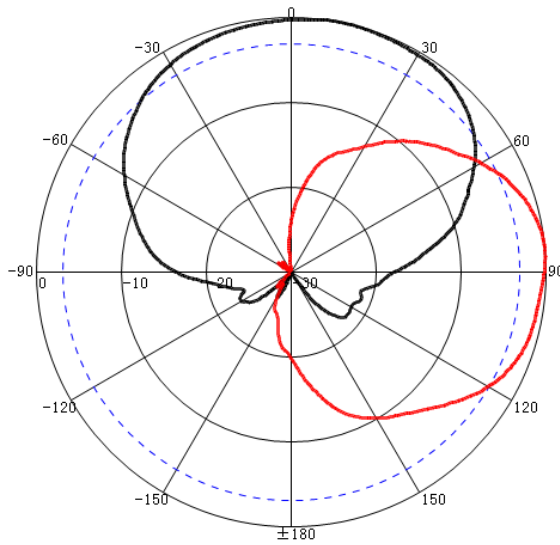
Gain:9.70dBi



Freq:2450MHz
Date:2014-03-14
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-20.66dB
HPBW(3dB):88.08°
FBR:26.48dB

Freq:2450MHz
Date:2014-03-14
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-18.82dB
HPBW(3dB):51.46°
FBR:29.17dB

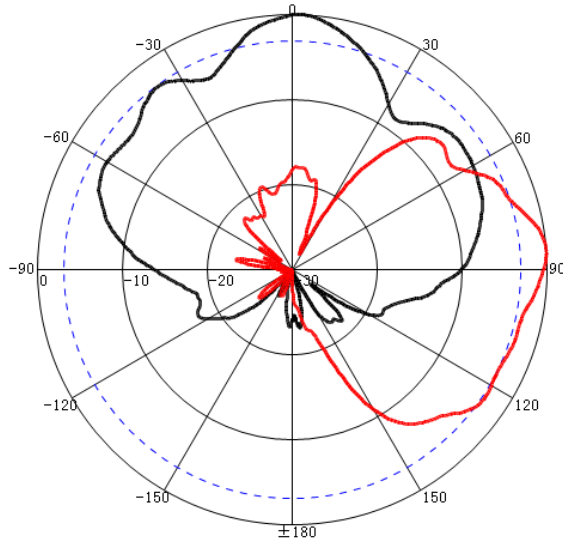
Gain:9.36dBi



Freq:2500MHz
Date:2014-03-14
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-21.09dB
HPBW(3dB):93.42°
FBR:26.58dB

Freq:2500MHz
Date:2014-03-14
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-19.89dB
HPBW(3dB):54.96°
FBR:29.94dB

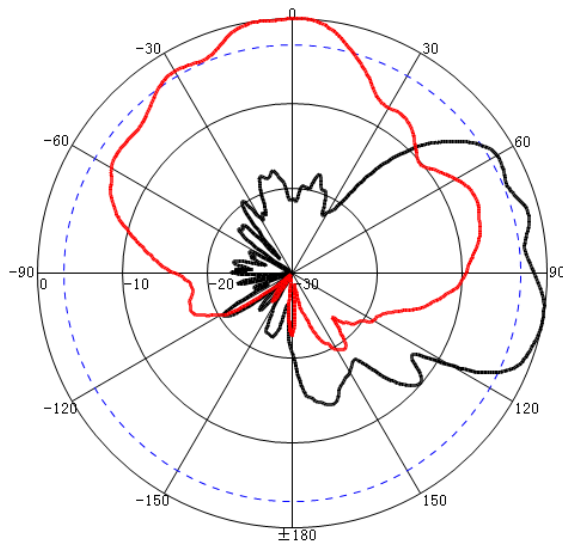
Gain:9.05dBi



Freq:4900MHz
Date:2014-03-13
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-23.92dB
HPBW(3dB):32.04°
FBR:23.09dB

Freq:4900MHz
Date:2014-03-13
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-25.29dB
HPBW(3dB):42.76°
FBR:23.22dB

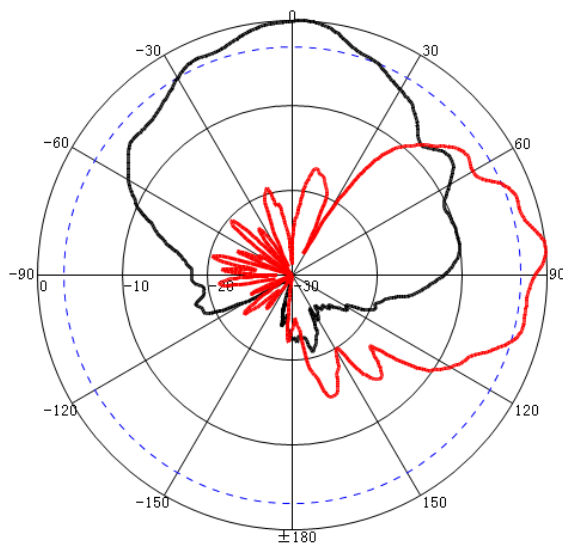
Gain:9.90dBi



Freq:5400MHz
Date:2014-03-13
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-31.58dB
HPBW(3dB):59.35°
FBR:21.77dB

Freq:5400MHz
Date:2014-03-13
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-28.10dB
HPBW(3dB):50.50°
FBR:20.30dB

Gain:10.20dBi

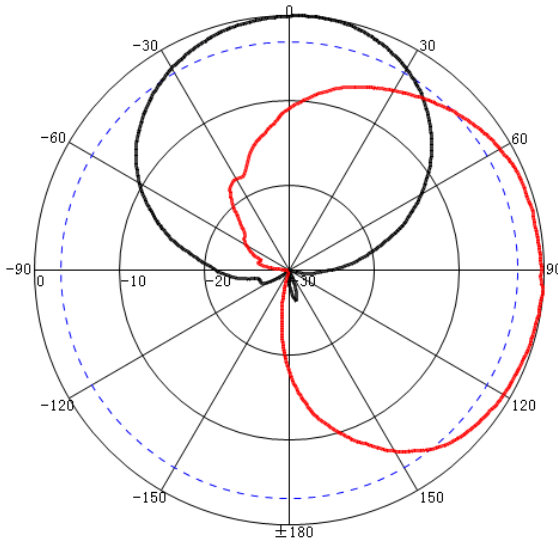


Freq:5850MHz
Date:2014-03-13
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-31.06dB
HPBW(3dB):51.25°
FBR:20.68dB

Freq:5850MHz
Date:2014-03-13
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-33.79dB
HPBW(3dB):39.91°
FBR:20.36dB

Gain:11.34dBi

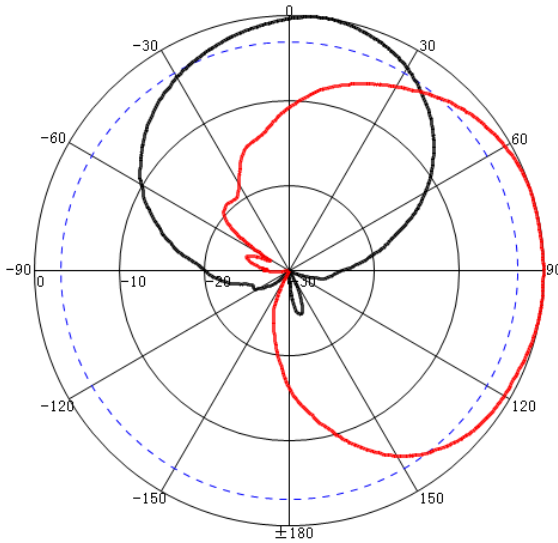
RF Antenna Patterns – H-Pol



Freq:2400MHz
Date:2014-03-22
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-20.50dB
HPBW(3dB):65.62°
FBR:26.28dB

Freq:2400MHz
Date:2014-03-22
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-20.83dB
HPBW(3dB):94.56°
FBR:23.53dB

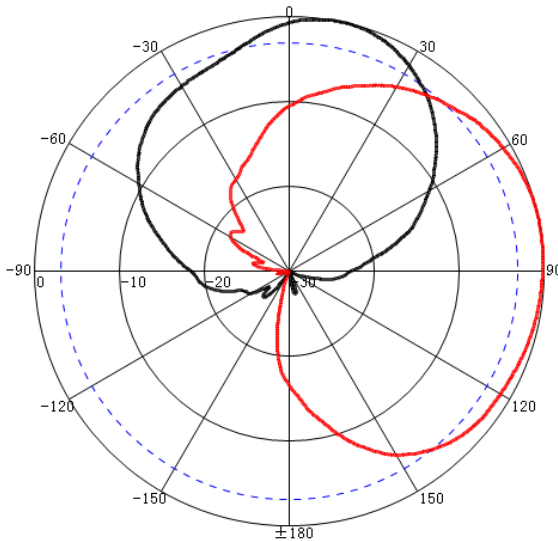
Gain:8.43dBi



Freq:2450MHz
Date:2014-03-22
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-20.08dB
HPBW(3dB):57.94°
FBR:24.67dB

Freq:2450MHz
Date:2014-03-22
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-20.22dB
HPBW(3dB):100.82°
FBR:21.80dB

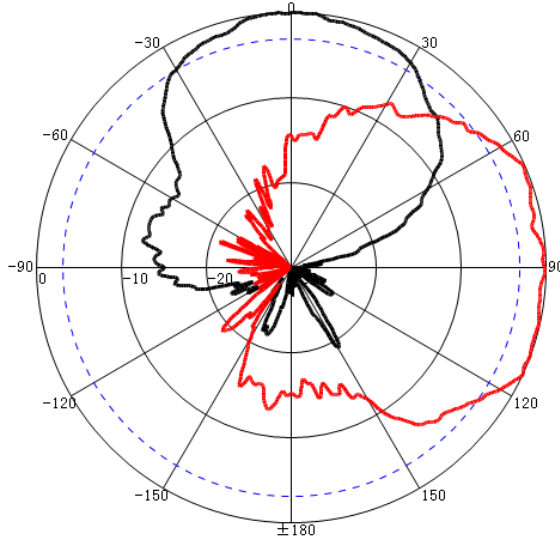
Gain:8.39dBi



Freq:2500MHz
Date:2014-03-22
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-20.15dB
HPBW(3dB):47.18°
FBR:26.00dB

Freq:2500MHz
Date:2014-03-22
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-20.13dB
HPBW(3dB):97.91°
FBR:25.59dB

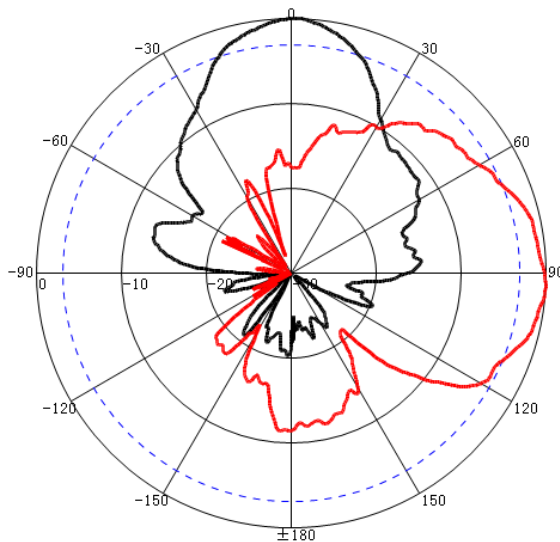
Gain:8.52dBi



Freq:4900MHz
Date:2014-03-22
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-41.43dB
HPBW(3dB):63.41°
FBR:21.56dB

Freq:4900MHz
Date:2014-03-22
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-42.14dB
HPBW(3dB):71.38°
FBR:21.07dB

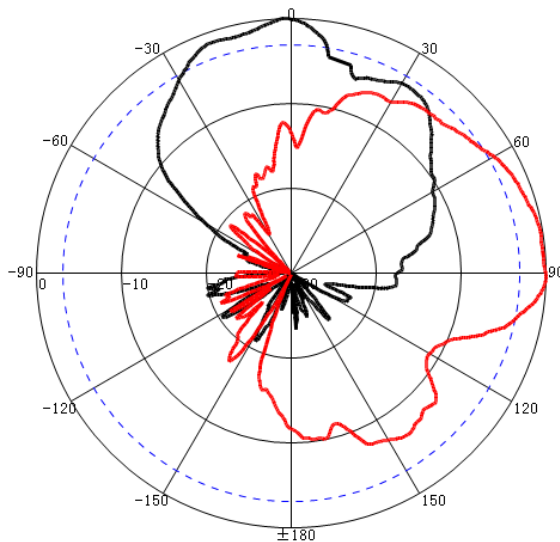
Gain:9.39dBi



Freq:5400MHz
Date:2014-03-22
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-34.84dB
HPBW(3dB):35.13°
FBR:20.25dB

Freq:5400MHz
Date:2014-03-22
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-35.20dB
HPBW(3dB):44.58°
FBR:21.02dB

Gain:11.73dBi



Freq:5850MHz
Date:2014-03-22
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-34.68dB
HPBW(3dB):36.60°
FBR:20.99dB

Freq:5850MHz
Date:2014-03-22
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-34.86dB
HPBW(3dB):43.37°
FBR:21.02dB

Gain:10.32dBi