

HyperLink Wireless 2.4/5.8GHz Triple Element Dual Polarized Flat Panel Antenna Model: HG2458-14DP-3NF

Features

- Three Independent 14 dBi Antennas
- 802.3a/b/g/n Radio Applications
- MIMO – Multiple-Input and Multiple-Output
- Dual Polarity feed system in single enclosure
- Dual Band, high gain operation
- Two vertical and one horizontal elements
- UV-resistant radome for all-weather operation

Applications

- 2.4/5.8 GHz Indoor/Outdoor Wireless LAN systems
- Supports 1x2, 2x2, 2x3, 3x3 MIMO AP/Router
- Supports IEEE 802.11 a/b/g/n applications
- MIMO, WISP, WiFi
- Hospitality, Industrial, Municipality



Description

Superior Performance

The HyperLink HG2458-14DP-3NF Flat Panel Antenna combines three dual band antennas in a single housing. The unit consists of two vertically and one 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 and 5.8 GHz frequency bands. The unit can be used with APs and Routers with 1, 2 or 3 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 HG2458-14DP-3NF 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 (3x) |
| 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 (1.6kg including the bracket) |
| Mounting Mast Size (Dia.) | 0.75–2.00 in. (19-50 mm) |
| RoHS Compliant | Yes |

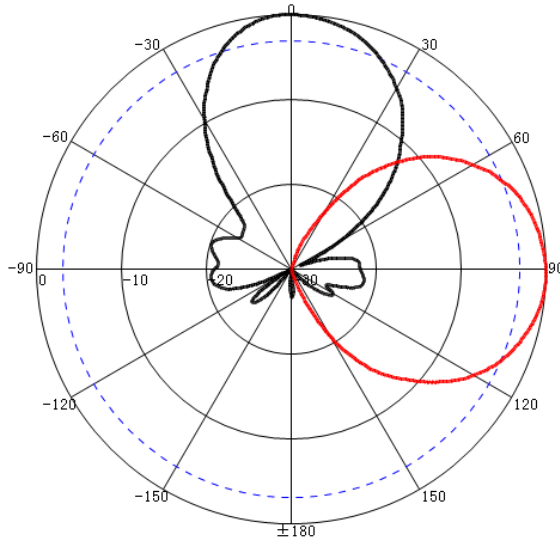
Electrical Specifications

| | |
|-----------------------------------|-----------------------------------|
| Frequency Range | 2400-2500/5125-5875 MHz |
| Gain | 12-14dBi |
| Polarization | Vertical (2x) and Horizontal (1x) |
| Max VSWR | <1.8 |
| V pol Horizontal Beamwidth | 86° |
| H pol Horizontal Beamwidth | 75° |
| Vertical Beamwidth | 23° |
| F/B Ratio | >25dB |
| Cross-pol Isolation | >28dB |
| Max. Input Power | 10 watts |
| Lightning Protection | DC Ground |
| Input Impedance | 50 Ohm |

Wind Loading Data

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

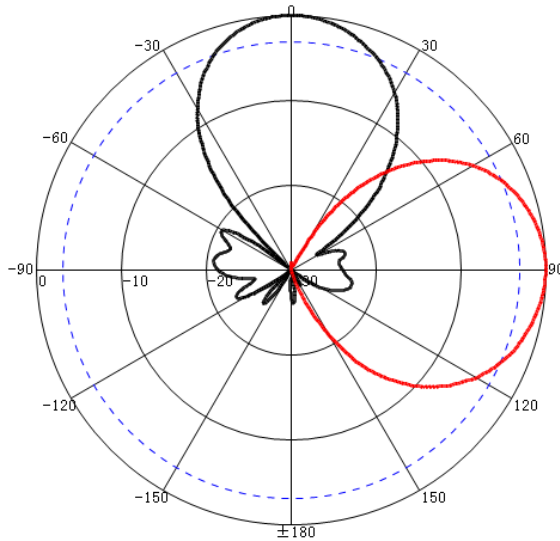
RF Antenna Patterns – H-Pol



Freq:2400MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-12.71dB
HPBW(3dB):40.37°
FBR:26.57dB

Freq:2400MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-11.71dB
HPBW(3dB):45.84°
FBR:32.12dB

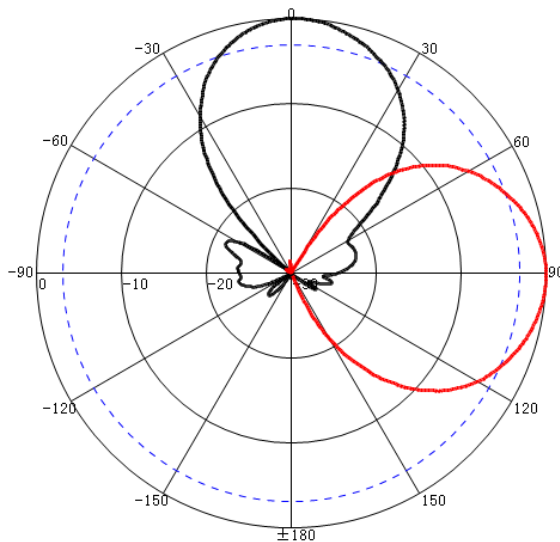
Gain:13.04dBi



Freq:2450MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-13.02dB
HPBW(3dB):41.45°
FBR:26.04dB

Freq:2450MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-12.11dB
HPBW(3dB):46.52°
FBR:31.11dB

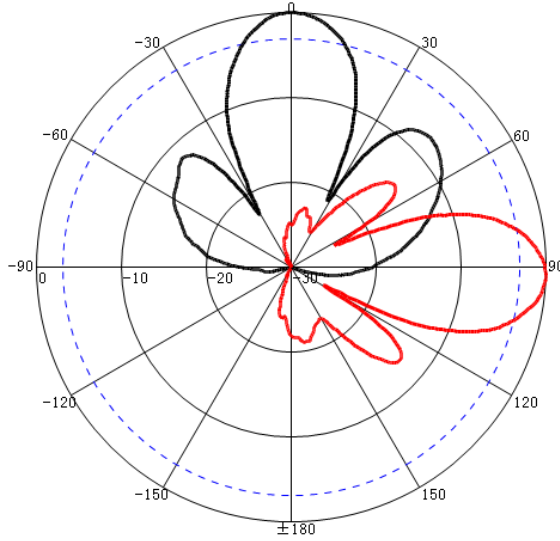
Gain:13.02dBi



Freq:2500MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-13.25dB
HPBW(3dB):41.66°
FBR:29.25dB

Freq:2500MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-13.65dB
HPBW(3dB):44.36°
FBR:29.33dB

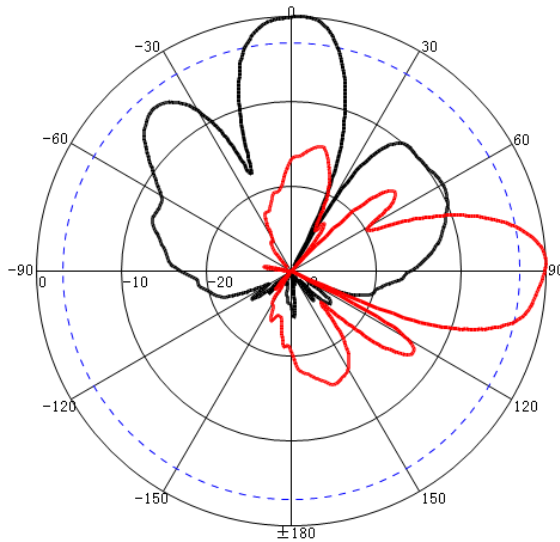
Gain:13.09dBi



Freq:51.25MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-16.80dB
HPBW(3dB):25.56°
FBR:32.61dB

Freq:51.25MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-17.17dB
HPBW(3dB):22.50°
FBR:32.96dB

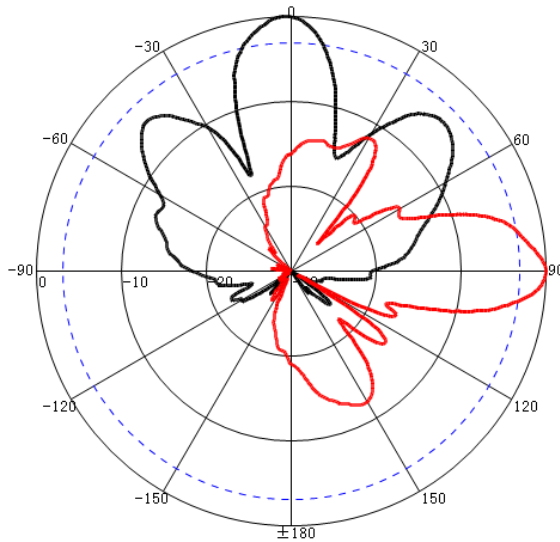
Gain:15.72dBi



Freq:5500MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-20.94dB
HPBW(3dB):23.07°
FBR:24.49dB

Freq:5500MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-20.62dB
HPBW(3dB):23.75°
FBR:26.70dB

Gain:14.42dBi

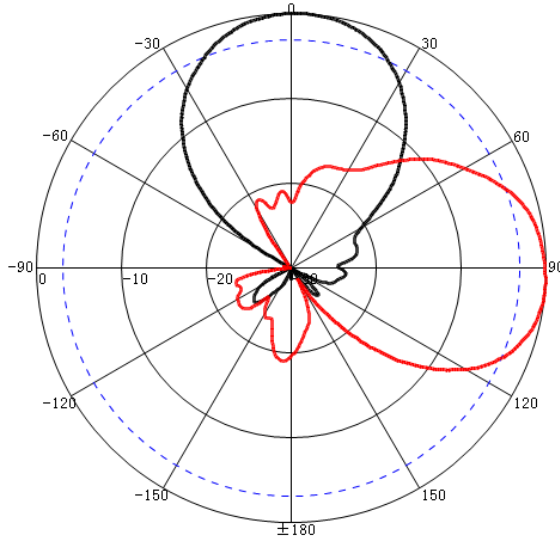


Freq:5875MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-22.91dB
HPBW(3dB):20.13°
FBR:29.51dB

Freq:5875MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-23.82dB
HPBW(3dB):17.35°
FBR:27.64dB

Gain:14.08dBi

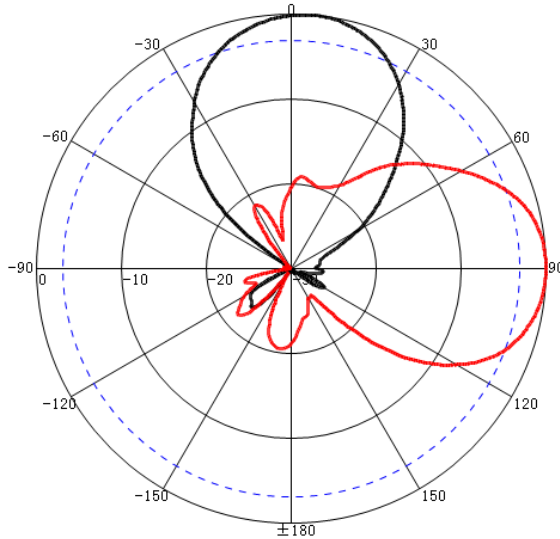
RF Antenna Patterns – V-Pol



Freq:2400MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-12.16dB
HPBW(3dB):46.78°
FBR:27.00dB

Freq:2400MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-12.42dB
HPBW(3dB):43.04°
FBR:23.22dB

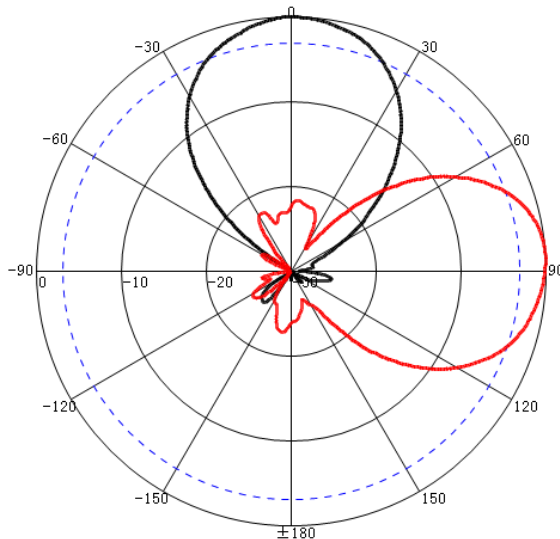
Gain:12.61dBi



Freq:2450MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-11.59dB
HPBW(3dB):43.36°
FBR:28.49dB

Freq:2450MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-13.17dB
HPBW(3dB):40.63°
FBR:23.64dB

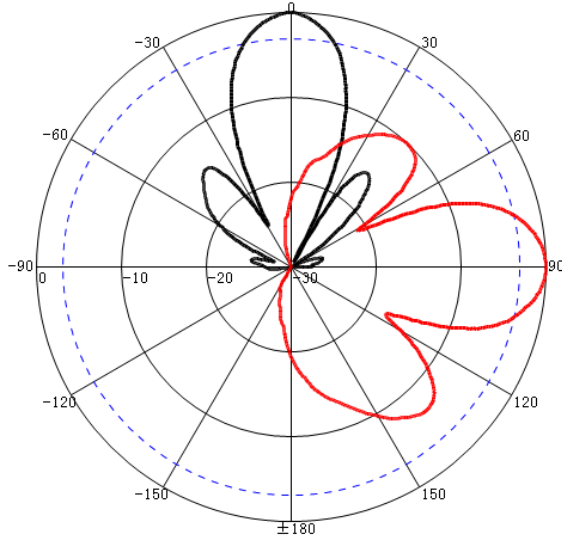
Gain:13.21dBi



Freq:2500MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-12.79dB
HPBW(3dB):44.52°
FBR:28.88dB

Freq:2500MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-13.67dB
HPBW(3dB):39.17°
FBR:24.58dB

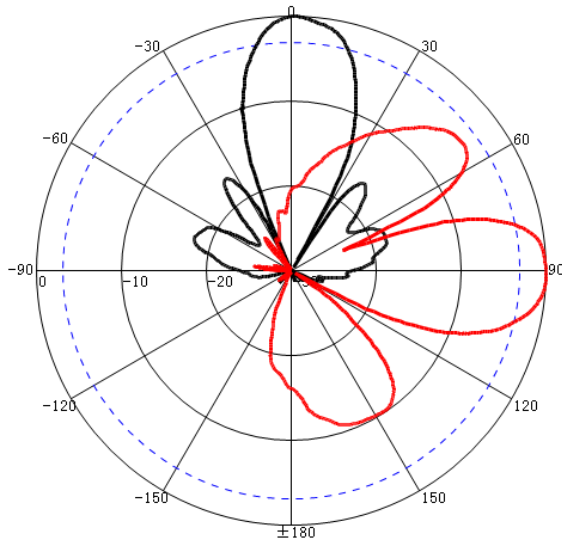
Gain:13.42dBi



Freq:5125MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-16.90dB
HPBW(3dB):22.48°
FBR:33.93dB

Freq:5125MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-17.71dB
HPBW(3dB):25.42°
FBR:30.19dB

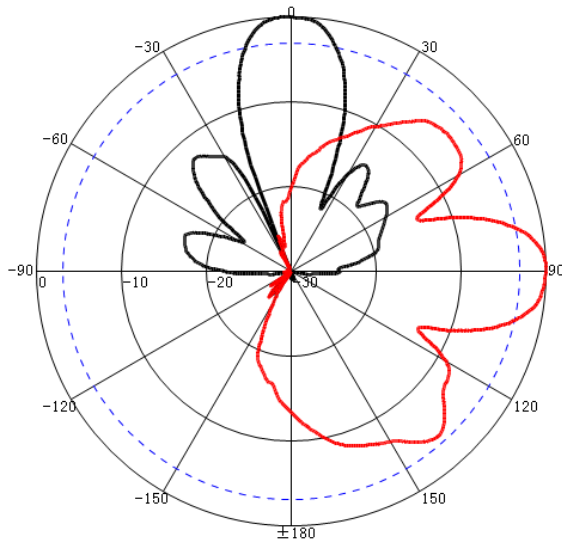
Gain:15.66dBi



Freq:5500MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-21.33dB
HPBW(3dB):22.90°
FBR:28.68dB

Freq:5500MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-20.75dB
HPBW(3dB):24.32°
FBR:25.56dB

Gain:15.19dBi



Freq:5875MHz
Date:2013-01-16
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-24.67dB
HPBW(3dB):22.64°
FBR:28.88dB

Freq:5875MHz
Date:2013-01-16
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-23.73dB
HPBW(3dB):23.16°
FBR:29.02dB

Gain:13.90dBi