HyperLink Wireless Multi-Band 2.4/4.9-5.8 GHz Cross Polarized Flat Panel Antenna Model: HG2458-15XP

Applications

- 2.4/4.9/5.1/5.3/5.4/5.8 GHz Wireless LAN systems
- IEEE 802.11a/b/g/n and 802.11ac applications
- 2.4 GHz and 5.8 GHz wireless video systems
- Homeland security and public safety services
- Ideal for Multi-Band MIMO radios (802.11a/b/g/n/ac)

RoHS Compliant

Features

- Multi-band operation: 2.4 GHz and 4.9 GHz to 5.8 GHz
- Independent cross polarized (X-Pol) 2.4/4.9-5.8 GHz antennas within one enclosure
- UV-resistant radome for all-weather operation
- Cross polarized feed system - (2) N-Female connectors
- Includes tilt-and-swivel pole mount kit

Description

The Hyperlink HG2458-15XP is a high performance multi-band directional flat patch antenna designed with two independent cross polarized internal antennas fed via (2) connectors. Suitable for indoor and outdoor applications in the 2.4GHz (2400-2500 MHz) and 4.9-5.8 GHz (4900-5850 MHz) band, the multi-band design of this antenna 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. The HG2458-15XP is designed primarily for MIMO point-to-multipoint and point-to-point applications. The unit can be used with APs and Routers with 1 or 2 antenna ports.

Cross Polarized

The HG2458-15XP features two independent 2.4/4.9-5.8 GHz antennas that are cross polarization. This feature doubles the wireless capacity over the same channels. Each antenna is fed via two N-Female ports, one for +45° polarized and one for -45° polarized signals. This feature makes this antenna ideal for polarization diversity systems.

This aesthetically pleasing antenna features a heavy-duty UV-resistant plastic radome ideal for all-weather indoor and outdoor operation. The HG2458-15XP 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	13 dBi (2.4 GHz) / 15 dBi (5 GHz)
Horizontal Beam Width	43° (2.4 GHz) / 25° (5 GHz)
Vertical Beam Width	41° (2.4 GHz) / 25° (5 GHz)
Polarization	±45°
Impedance	50 Ohm
Front to Back Ratio	25 dB
Max. Input Power	25 Watts
VSWR	≤ 2.0
Lightning Protection	DC Ground

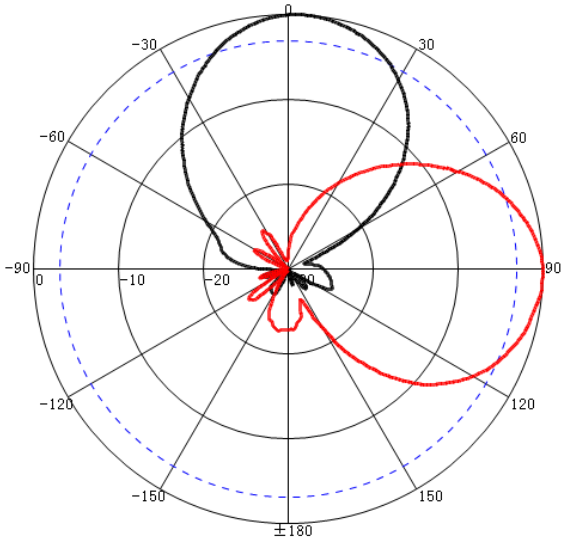
Mechanical Specifications

Connector Interface	N-Female (2x)
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	3.3 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.

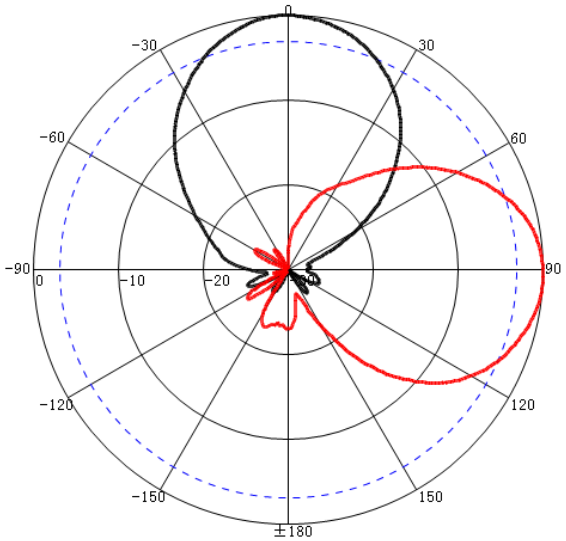
RF Antenna Patterns - +45°



Freq:2400MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:+45°
Max:-16.12dB
HPBW(3dB):44.67°
FBR:26.55dB

Freq:2400MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:+45°
Max:-16.10dB
HPBW(3dB):41.72°
FBR:25.41dB

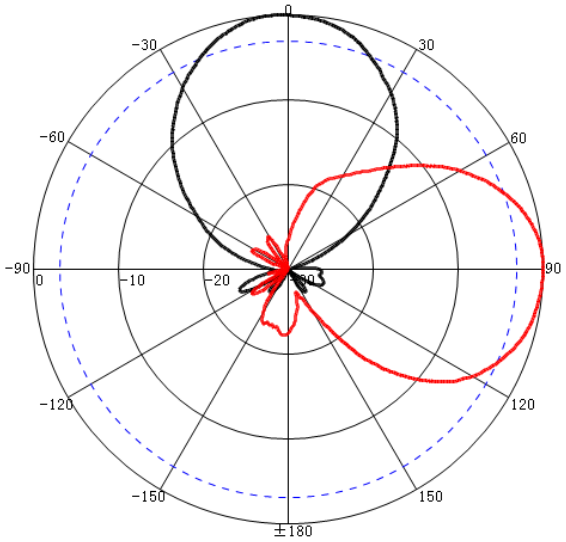
Gain:12.72dBi



Freq:2450MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:+45°
Max:-16.06dB
HPBW(3dB):43.25°
FBR:27.15dB

Freq:2450MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:+45°
Max:-16.28dB
HPBW(3dB):41.63°
FBR:25.43dB

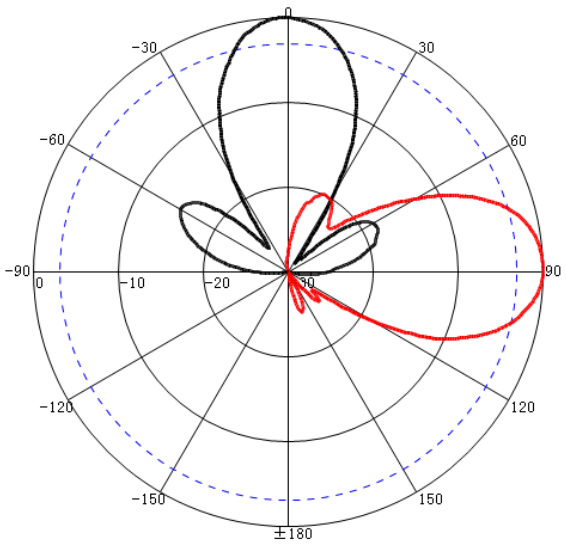
Gain:12.79dBi



Freq:2500MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:+45°
Max:-16.24dB
HPBW(3dB):43.30°
FBR:27.19dB

Freq:2500MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:+45°
Max:-17.12dB
HPBW(3dB):43.35°
FBR:25.11dB

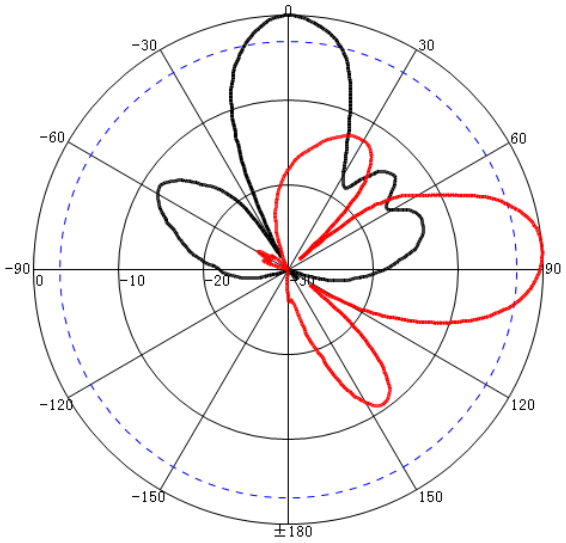
Gain:12.71dBi



Freq:4900MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:+45°
Max:-17.49dB
HPBW(3dB):26.63°
FBR:31.09dB

Freq:4900MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:+45°
Max:-17.17dB
HPBW(3dB):28.73°
FBR:32.83dB

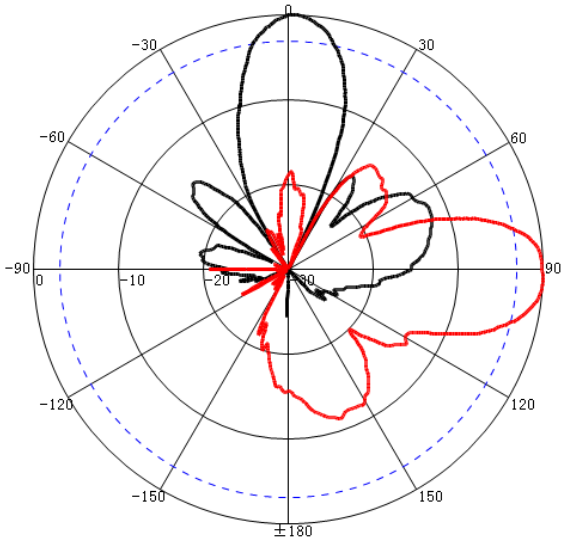
Gain:16.44dBi



Freq:5400MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:+45°
Max:-22.10dB
HPBW(3dB):24.14°
FBR:29.67dB

Freq:5400MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:+45°
Max:-21.66dB
HPBW(3dB):24.92°
FBR:26.87dB

Gain:15.37dBi

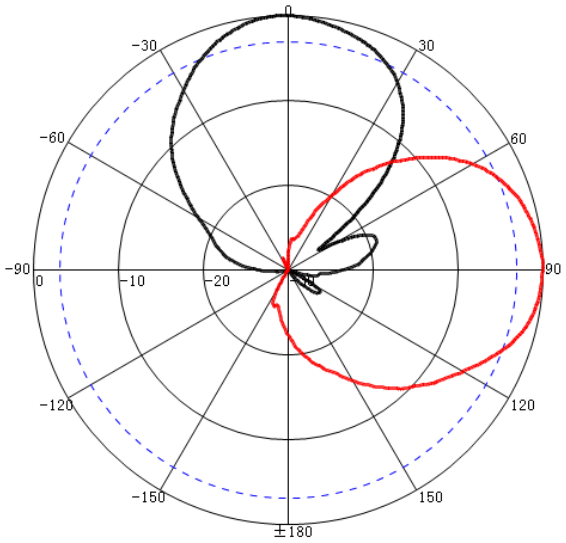


Freq:5850MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:+45°
Max:-23.24dB
HPBW(3dB):20.40°
FBR:24.35dB

Freq:5850MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:+45°
Max:-27.57dB
HPBW(3dB):23.35°
FBR:20.68dB

Gain:16.11dBi

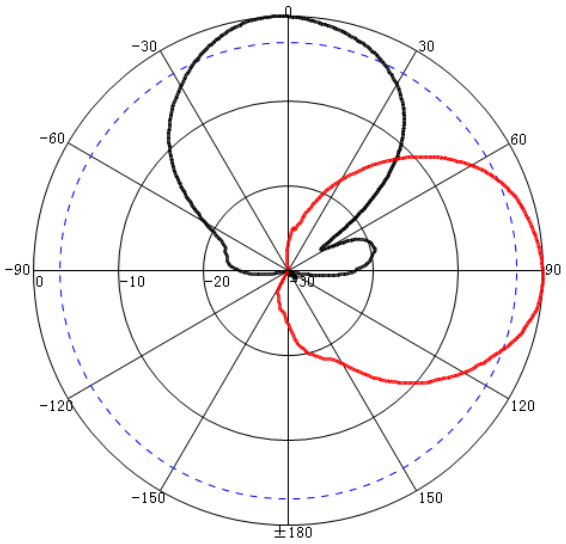
RF Antenna Patterns - -45°



Freq:2400MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:-45°
Max:-16.38dB
HPBW(3dB):47.13°
FBR:31.39dB

Freq:2400MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:-45°
Max:-16.28dB
HPBW(3dB):43.75°
FBR:30.26dB

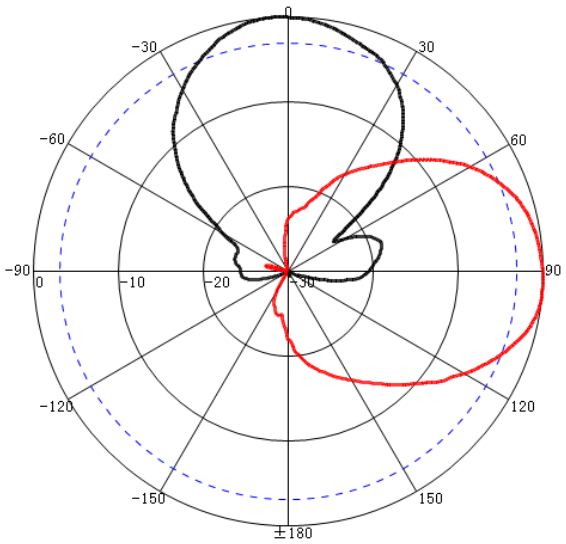
Gain:12.37dBi



Freq:2450MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:-45°
Max:-16.29dB
HPBW(3dB):48.11°
FBR:29.35dB

Freq:2450MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:-45°
Max:-15.92dB
HPBW(3dB):43.18°
FBR:29.97dB

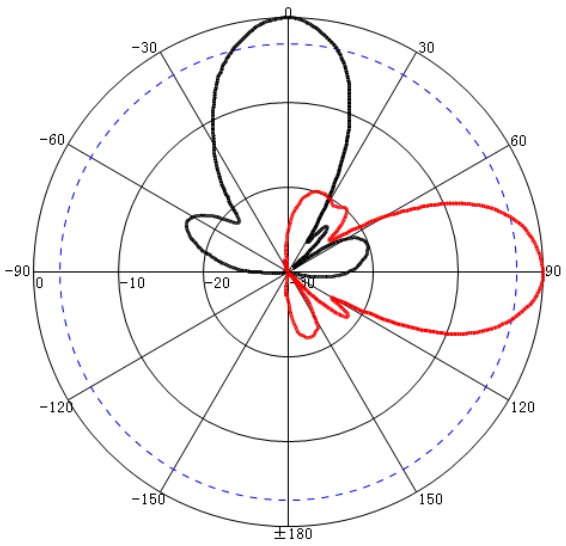
Gain:12.36dBi



Freq:2500MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:-45°
Max:-16.80dB
HPBW(3dB):47.19°
FBR:29.32dB

Freq:2500MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:-45°
Max:-16.99dB
HPBW(3dB):43.82°
FBR:27.19dB

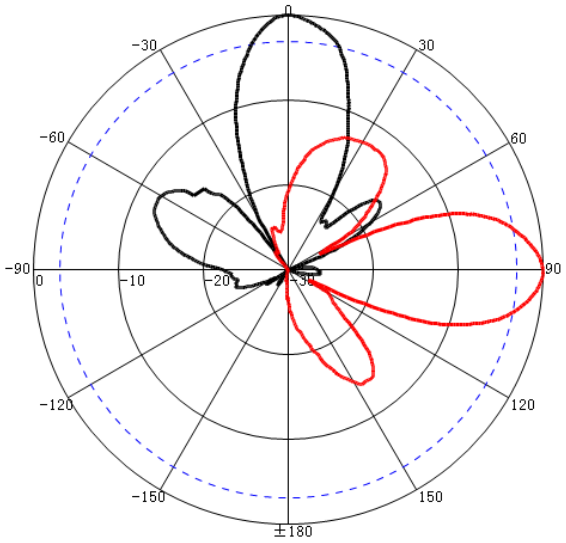
Gain:12.37dBi



Freq:4900MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:-45°
Max:-17.01dB
HPBW(3dB):26.19°
FBR:35.85dB

Freq:4900MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:-45°
Max:-18.18dB
HPBW(3dB):25.71°
FBR:36.45dB

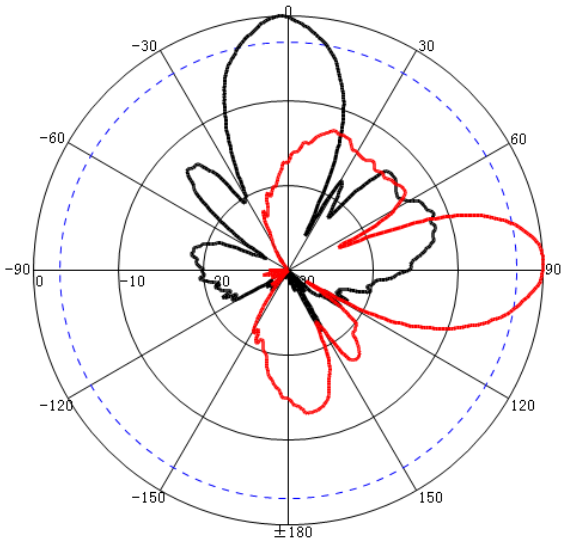
Gain:16.82dBi



Freq:5400MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:-45°
Max:-20.68dB
HPBW(3dB):21.89°
FBR:30.44dB

Freq:5400MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:-45°
Max:-22.65dB
HPBW(3dB):20.78°
FBR:30.33dB

Gain:16.59dBi



Freq:5850MHz
Date:2013-08-15
Elevation:H-plane
Polar-Across:Main
Polarization:-45°
Max:-26.88dB
HPBW(3dB):21.80°
FBR:21.73dB

Freq:5850MHz
Date:2013-08-15
Elevation:V-plane
Polar-Across:Main
Polarization:-45°
Max:-23.64dB
HPBW(3dB):21.40°
FBR:27.02dB

Gain:15.40dBi