

HyperLink Wireless 5.1-5.8 GHz 16 dBi Cross Polarized 90° Sector Antenna Model: HG5158-16XP-090

Applications

- 5.1/5.3/5.4/5.8 GHz Wireless LAN systems
- IEEE 802.11a/n applications
- MIMO applications
- WiMAX, WISP, WiFi, mobile communication and cell-sites
- Dual Diversity / Dual Antenna Radios

Features

- Independent cross polarized (X-Pol) antennas within one enclosure
- Dual polarity feed system – (2) N-Female connectors
- All weather operation
- Heavy duty steel mounting bracket with easy elevation and tilt adjustment



Description

The Hyperlink HG5158-16XP-090 antenna is designed with two independent cross polarized internal antennas fed via (2) connectors. The HG5158-16XP-090 provides high gain with a wide 90° beam-width making them ideal professional quality “cell site” antennas designed primarily for service providers in the 5.8 GHz ISM band. Applications include IEEE 802.11a and 802.11n wireless LAN systems. This model is also ideal for use with wireless access points, CPEs and routers that have dual antenna ports and MIMO capabilities.

Cross Polarized – X-Pol

The HG5158-16XP-090 features two independent antennas that are cross polarization. This feature doubles the wireless capacity over the same channels. Each antenna is fed via two N-Female ports, once for +45° polarized and one for -45° polarized signals. This feature makes this antenna ideal for polarization diversity systems.



Rugged and Weatherproof

This antenna's construction features a UV resistant PVC radome for durability and aesthetics. Its mounting system features a heavy-duty up/down tilt mounting bracket. This allows installation at various degrees of incline for easy alignment.

Specifications

Electrical Specifications

| | |
|-------------------------------|---------------|
| Frequency | 5150-5850 MHz |
| Gain | 16 dBi |
| Horizontal Beam Width | 90° |
| Vertical Beam Width | 7° |
| Polarization | ±45° |
| Impedance | 50 Ohm |
| Front to Back Ratio | > 23 dB |
| Port to Port Isolation | > 21 dB |
| Max. Input Power | 50 Watts |
| VSWR | < 1.8:1 avg. |
| Lightning Protection | DC Ground |

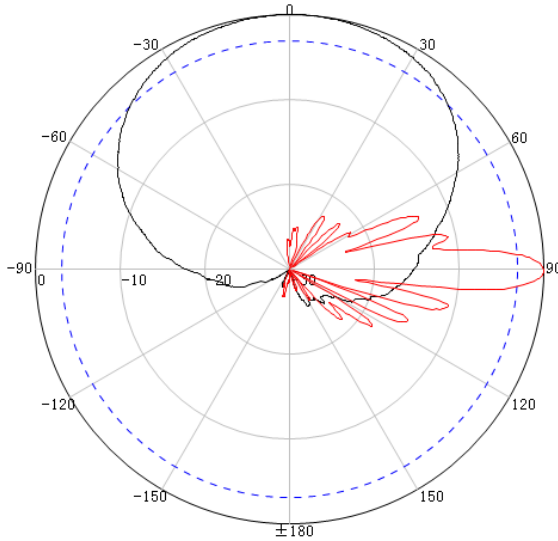
Mechanical Specifications

| | |
|-----------------------------------|---|
| Connectors | (2) N-Female |
| Weight (Including Bracket) | 2.2 lbs. (2.2kg) |
| Dimensions | 18.5 x 4.5 x 2.5 in (470 x 115 x 65 mm) |
| Radome Material | UV-Resistant PVC |
| Radome Color | White |
| Mounting Mast Size (Dia.) | 1.2–2.0 in. (30-50mm) |
| Operating Temperature | -40° C to 60° C (-40° F to 140° F) |
| Rated Wind Velocity | 210Km/h |
| RoHS Compliant | Yes |

Wind Loading Data

| Wind Speed (MPH) | Loading – Front | Loading – Side |
|-------------------------|------------------------|-----------------------|
| 100 | 30 lbs | 16 lbs |
| 125 | 46 lbs | 26 lbs |

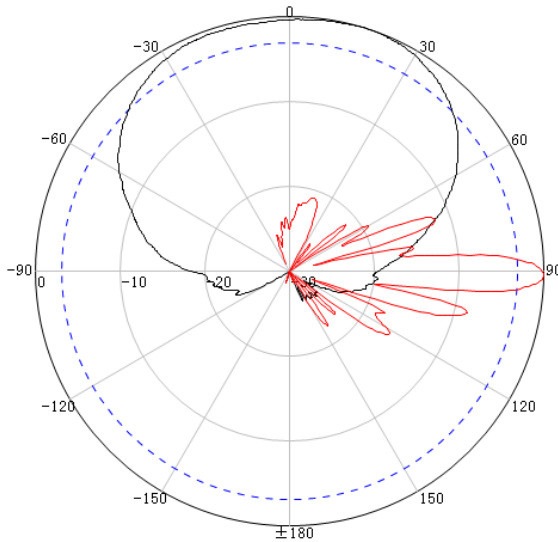
Antenna Patterns +45°



Freq:5150MHz
 Date:2013-08-21
 Elevation:H-plane
 Polar-Across:Main
 Polarization:+45°
 Max:-16.79dB
 HPBW(3dB):87.58°
 FBR:25.07dB

Freq:5150MHz
 Date:2013-08-21
 Elevation:V-plane
 Polar-Across:Main
 Polarization:+45°
 Max:-18.02dB
 HPBW(3dB):7.86°
 FBR:30.11dB

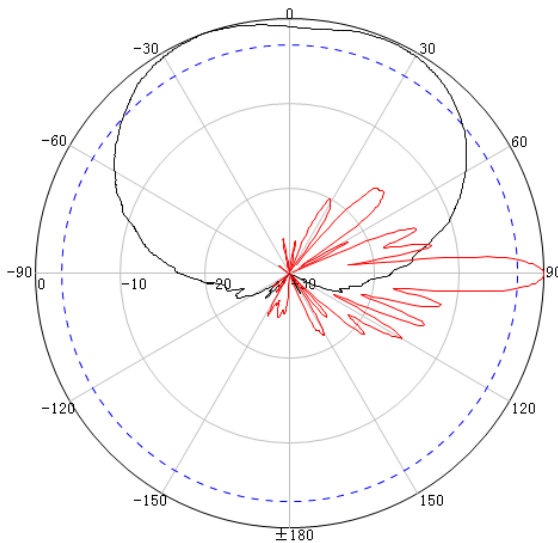
Gain:15.62dBi



Freq:5500MHz
 Date:2013-08-21
 Elevation:H-plane
 Polar-Across:Main
 Polarization:+45°
 Max:-18.75dB
 HPBW(3dB):89.59°
 FBR:26.04dB

Freq:5500MHz
 Date:2013-08-21
 Elevation:V-plane
 Polar-Across:Main
 Polarization:+45°
 Max:-20.22dB
 HPBW(3dB):7.51°
 FBR:30.10dB

Gain:15.35dBi

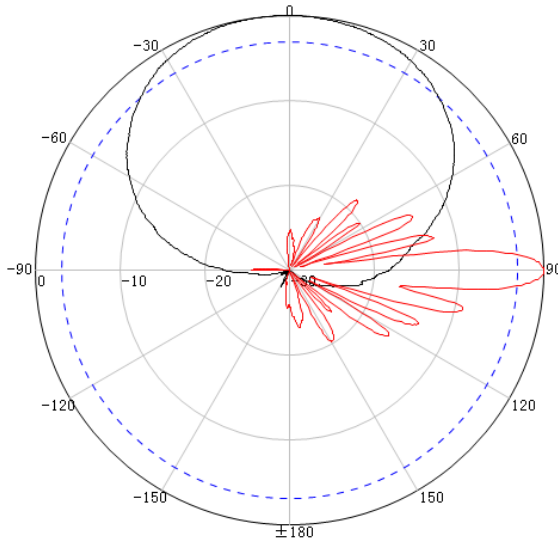


Freq:5850MHz
 Date:2013-08-21
 Elevation:H-plane
 Polar-Across:Main
 Polarization:+45°
 Max:-20.34dB
 HPBW(3dB):95.30°
 FBR:27.30dB

Freq:5850MHz
 Date:2013-08-21
 Elevation:V-plane
 Polar-Across:Main
 Polarization:+45°
 Max:-23.14dB
 HPBW(3dB):7.17°
 FBR:30.88dB

Gain:15.05dBi

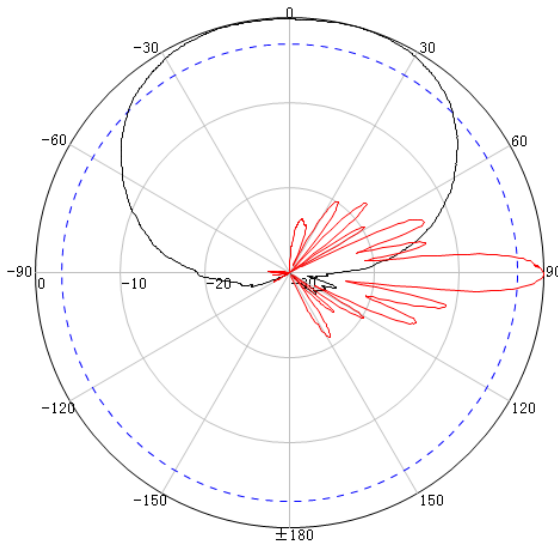
Antenna Patterns -45°



Freq:5150MHz
Date:2013-08-21
Elevation:H-plane
Polar-Across:Main
Polarization:-45°
Max:-17.36dB
HPBW(3dB):80.76°
FBR:27.76dB

Freq:5150MHz
Date:2013-08-21
Elevation:V-plane
Polar-Across:Main
Polarization:-45°
Max:-16.44dB
HPBW(3dB):7.73°
FBR:25.55dB

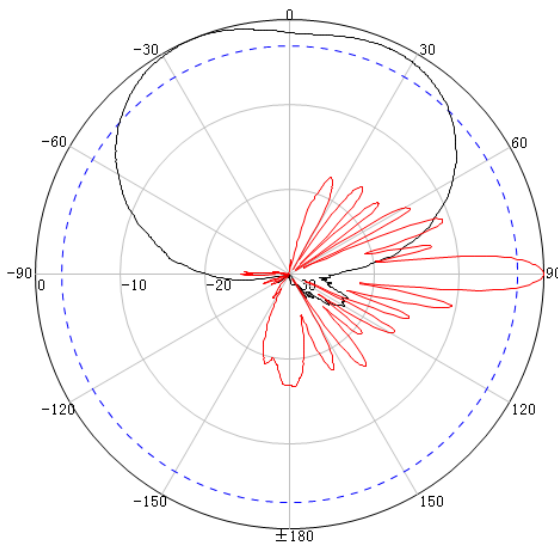
Gain:15.62dBi



Freq:5500MHz
Date:2013-08-21
Elevation:H-plane
Polar-Across:Main
Polarization:-45°
Max:-19.53dB
HPBW(3dB):89.89°
FBR:31.29dB

Freq:5500MHz
Date:2013-08-21
Elevation:V-plane
Polar-Across:Main
Polarization:-45°
Max:-18.60dB
HPBW(3dB):7.47°
FBR:27.46dB

Gain:15.71dBi



Freq:5850MHz
Date:2013-08-21
Elevation:H-plane
Polar-Across:Main
Polarization:-45°
Max:-21.92dB
HPBW(3dB):91.85°
FBR:28.91dB

Freq:5850MHz
Date:2013-08-21
Elevation:V-plane
Polar-Across:Main
Polarization:-45°
Max:-21.77dB
HPBW(3dB):7.08°
FBR:24.28dB

Gain:14.33dBi