

## HyperLink Wireless Low PIM Rated Cross Polarized DAS In-Building Panel Antenna Model: HG72708XWPP-NF

### Applications

- DAS (Distributed Antenna Systems)
- 700 MHz and cellular applications
- AWS (Advanced wireless services) and PCS (Personal communications service) band applications
- In-building wireless networks and LTE networks
- IEEE 802.11b/g applications

### Features

- Frequency coverage for 700 MHz, 850 MHz, AWS and PCS bands
- Low Passive InterModulation (PIM) rated
- Dual cross polarized (X-Pol) in one antenna
- Easily mounts to wall with included hardware and bracket
- Dual polarity feed system - (2) N-Female connectors



### Description

The HyperLink HG72708XWPPR-NF is a low PIM rated, high performance directional wall mount MIMO panel antenna specifically designed for in-building wireless networks such as DAS (Distributed Antenna Systems) which are used to distribute Cellular and WiFi signals throughout a building or area. 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 in-building wireless applications where wide coverage is desired.

### Cross Polarized

The HG72708XWPPR-NF features two independent antennas with cross polarization. This feature doubles the wireless capacity over the same channels. The antenna is fed via two plenum rated antenna leads terminated with N-Female connectors. One for +45° polarized and one for -45° polarized signals. This feature makes these antennas ideal for polarization diversity systems.



### Low PIM Rated

The key to providing the best performance in a DAS application is to ensure the components used are low PIM rated. This helps meet the increasing demand for higher data rates and the ability to provide streaming video for mobile devices. With a low PIM rating of <-150 dBc, the HG72705CU-PR helps meet the most demanding PIM requirements for LTE/4G bands.

The HG72708XWPPR-NG is designed specifically for in-building operation and is ideal for use in large open areas such as indoor courtyards, indoor sporting venues, convention centers and shopping malls. The included mounting bracket and hardware makes this antenna very easy to install.



**Specifications**

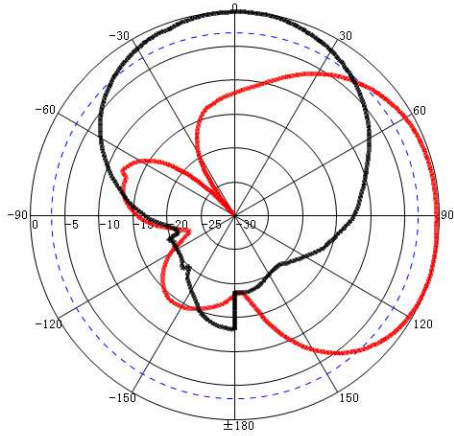
**Electrical Specifications**

<b>Frequency Range</b>	698-960 MHz	1710-2700 MHz
<b>Gain</b>	7.5 dBi	8.4 dBi
<b>Polarization</b>	±45	
<b>Horizontal Beamwidth (-3dB)</b>	70°	75°
<b>Vertical Beam Width(-3dB)</b>	75°	60°
<b>Impedance</b>	50 Ohm	
<b>Max. Input Power</b>	50 Watts	
<b>F/B Ratio</b>	15 dB	20 dB
<b>Isolation</b>	20 dB	
<b>VSWR</b>	< 1.8	< 1.7
<b>PIM, 3rd Order, 2 x 2 W</b>	<-150 dBc	

**Mechanical Specifications**

<b>Connector</b>	(2) N-Female
<b>Cable Length</b>	14 in. (35.6 cm)
<b>Weight</b>	3.08 lbs. (1.4 Kg)
<b>Dimensions</b>	11.8 x 8.2 x 3.0 in. (300 x 209 x 77 mm)
<b>Radome Material</b>	UV Resistant ABS
<b>Radome Color</b>	White
<b>Operating Temperature</b>	-40° C to +60° C (-40° F to 140° F)
<b>RoHS Compliant</b>	Yes

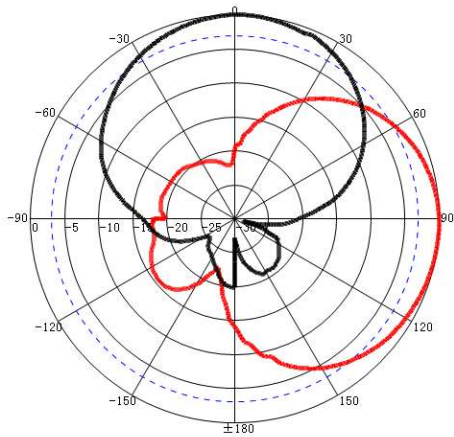
**RF Antenna Patterns - +45°**



Freq:698MHz  
 Date:2015-11-19  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-2.85dB  
 HPBW(3dB):92.08°  
 FBR:12.22dB  
 Circularity:18.27  
 Obliquity:-17.73°

Freq:698MHz  
 Date:2015-11-19  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-1.58dB  
 HPBW(3dB):78.80°  
 FBR:13.28dB  
 Circularity:11.87

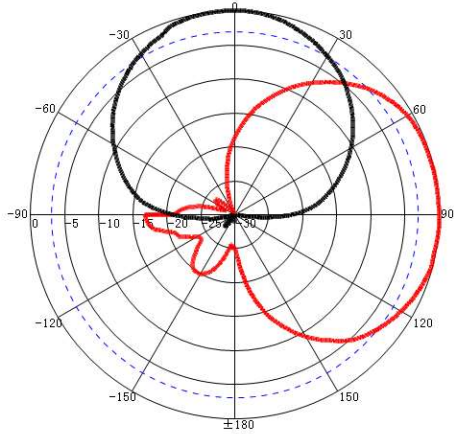
Gain:7.63dBi



Freq:827MHz  
 Date:2015-11-19  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-3.47dB  
 HPBW(3dB):81.39°  
 FBR:16.04dB  
 Circularity:12.82  
 Obliquity:-2.81°

Freq:827MHz  
 Date:2015-11-19  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-2.81dB  
 HPBW(3dB):73.68°  
 FBR:19.90dB  
 Circularity:15.34

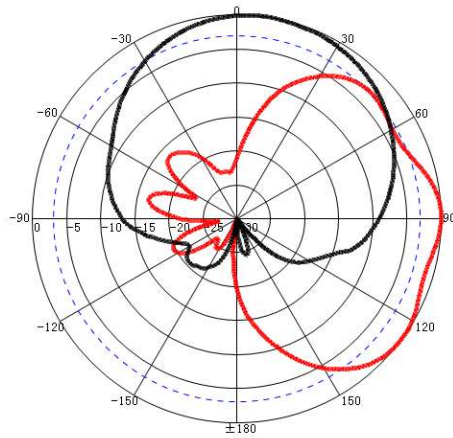
Gain:8.37dBi



Freq:960MHz  
 Date:2015-11-19  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-5.85dB  
 HPBW(3dB):90.94°  
 FBR:16.82dB  
 Circularity:17.55  
 Obliquity:-3.92°

Freq:960MHz  
 Date:2015-11-19  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-5.97dB  
 HPBW(3dB):62.38°  
 FBR:28.68dB  
 Circularity:25.96

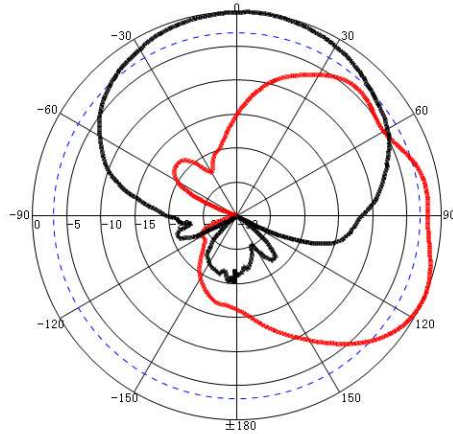
Gain:9.02dBi



Freq:1710MHz  
 Date:2015-11-19  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-18.10dB  
 HPBW(3dB):75.35°  
 FBR:16.76dB  
 Circularity:20.20  
 Obliquity:0.29°

Freq:1710MHz  
 Date:2015-11-19  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-17.84dB  
 HPBW(3dB):82.96°  
 FBR:21.82dB  
 Circularity:24.17

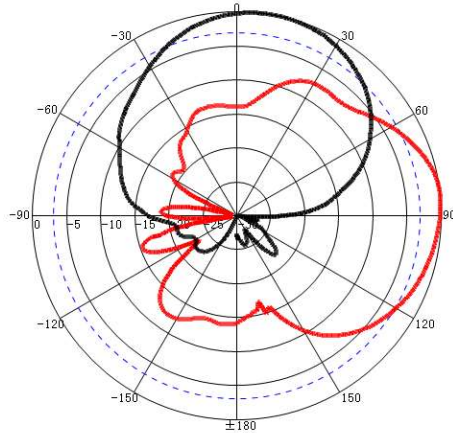
Gain:7.54dBi



Freq:1900MHz  
 Date:2015-11-19  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-16.83dB  
 HPBW(3dB):60.65°  
 FBR:19.93dB  
 Circularity:21.12  
 Obliquity:-23.68°

Freq:1900MHz  
 Date:2015-11-19  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-32.46dB  
 HPBW(3dB):89.11°  
 FBR:20.08dB  
 Circularity:33.30

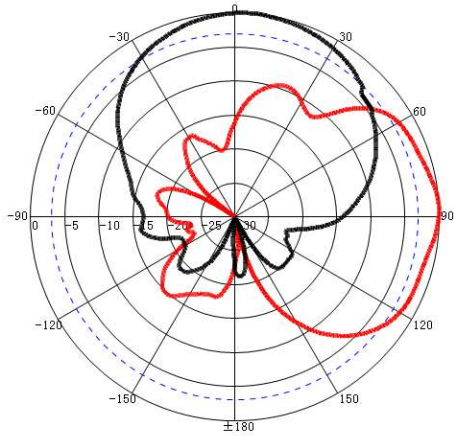
Gain:7.96dBi



Freq:2200MHz  
 Date:2015-11-19  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-20.47dB  
 HPBW(3dB):56.64°  
 FBR:15.36dB  
 Circularity:23.44  
 Obliquity:5.34°

Freq:2200MHz  
 Date:2015-11-19  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:+45°  
 Max:-20.29dB  
 HPBW(3dB):64.83°  
 FBR:25.47dB  
 Circularity:18.91

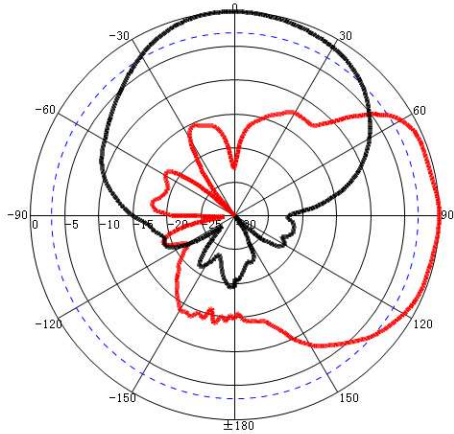
Gain:9.22dBi



Freq: 2450MHz  
 Date: 2015-11-19  
 Elevation: V-plane  
 Polar-Across: Main  
 Polarization: +45°  
 Max: -23.37dB  
 HPBW(3dB): 70.33°  
 FBR: 18.19dB  
 Circularity: 16.02  
 Obliquity: 2.32°

Freq: 2450MHz  
 Date: 2015-11-19  
 Elevation: H-plane  
 Polar-Across: Main  
 Polarization: +45°  
 Max: -23.59dB  
 HPBW(3dB): 74.35°  
 FBR: 21.17dB  
 Circularity: 34.78

Gain: 9.04dBi

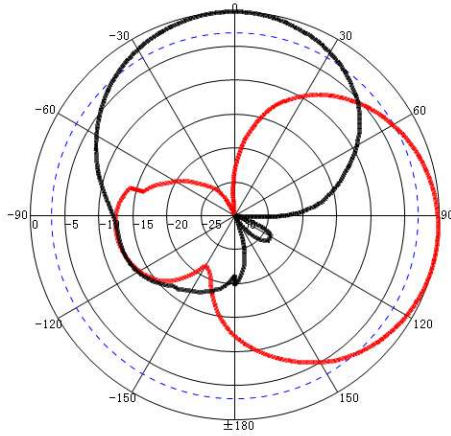


Freq: 2700MHz  
 Date: 2015-11-19  
 Elevation: V-plane  
 Polar-Across: Main  
 Polarization: +45°  
 Max: -27.47dB  
 HPBW(3dB): 73.41°  
 FBR: 17.77dB  
 Circularity: 21.47  
 Obliquity: -0.41°

Freq: 2700MHz  
 Date: 2015-11-19  
 Elevation: H-plane  
 Polar-Across: Main  
 Polarization: +45°  
 Max: -25.27dB  
 HPBW(3dB): 74.55°  
 FBR: 19.38dB  
 Circularity: 16.19

Gain: 8.75dBi

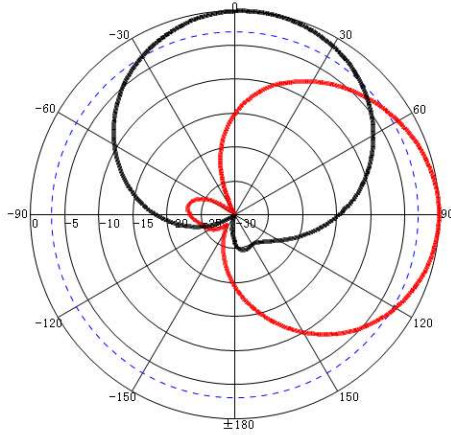
**RF Antenna Patterns - -45°**



Freq:698MHz  
Date:2015-11-19  
Elevation:V-plane  
Polar-Across:Main  
Polarization:-45°  
Max:-2.07dB  
HPBW(3dB):77.07°  
FBR:12.42dB  
Circularity:30.50  
Obliquity:10.54°

Freq:698MHz  
Date:2015-11-19  
Elevation:H-plane  
Polar-Across:Main  
Polarization:-45°  
Max:-1.06dB  
HPBW(3dB):75.33°  
FBR:17.25dB  
Circularity:20.55

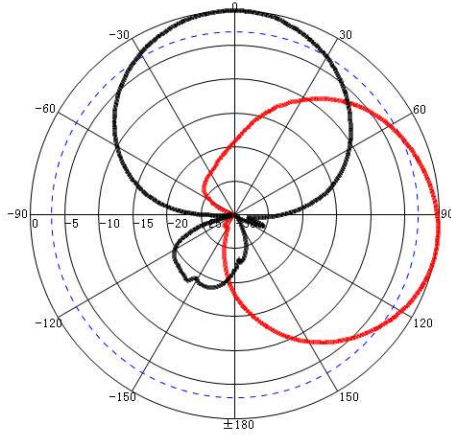
Gain:8.32dBi



Freq:827MHz  
Date:2015-11-19  
Elevation:V-plane  
Polar-Across:Main  
Polarization:-45°  
Max:-2.06dB  
HPBW(3dB):66.21°  
FBR:23.02dB  
Circularity:24.78  
Obliquity:0.71°

Freq:827MHz  
Date:2015-11-19  
Elevation:H-plane  
Polar-Across:Main  
Polarization:-45°  
Max:-2.08dB  
HPBW(3dB):72.31°  
FBR:24.61dB  
Circularity:36.24

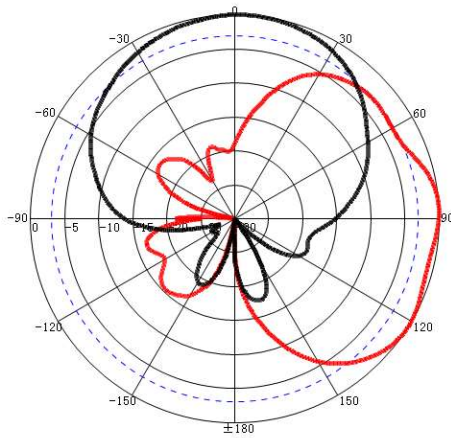
Gain:8.91dBi



Freq:960MHz  
Date:2015-11-19  
Elevation:V-plane  
Polar-Across:Main  
Polarization:-45°  
Max:-4.27dB  
HPBW(3dB):61.95°  
FBR:25.93dB  
Circularity:22.72  
Obliquity:9.01°

Freq:960MHz  
Date:2015-11-19  
Elevation:H-plane  
Polar-Across:Main  
Polarization:-45°  
Max:-5.33dB  
HPBW(3dB):62.10°  
FBR:18.58dB  
Circularity:20.46

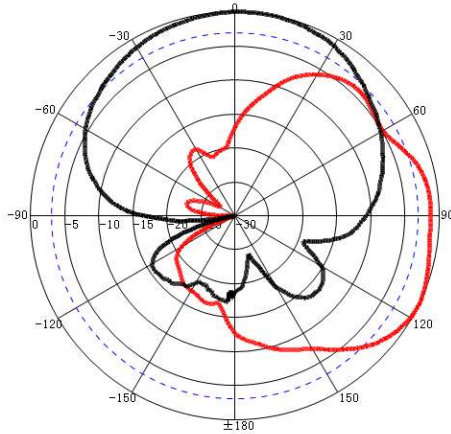
Gain:9.67dBi



Freq:1710MHz  
 Date:2015-11-19  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:-45°  
 Max:-19.51dB  
 HPBW(3dB):75.27°  
 FBR:16.52dB  
 Circularity:29.43  
 Obliquity:-31.38°

Freq:1710MHz  
 Date:2015-11-19  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:-45°  
 Max:-17.01dB  
 HPBW(3dB):81.49°  
 FBR:17.45dB  
 Circularity:19.54

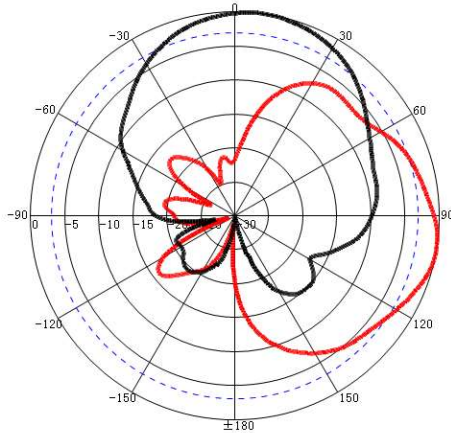
Gain:7.70dBi



Freq:1900MHz  
 Date:2015-11-19  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:-45°  
 Max:-16.89dB  
 HPBW(3dB):65.20°  
 FBR:21.16dB  
 Circularity:23.46  
 Obliquity:-25.53°

Freq:1900MHz  
 Date:2015-11-19  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:-45°  
 Max:-32.95dB  
 HPBW(3dB):91.07°  
 FBR:17.22dB  
 Circularity:18.36

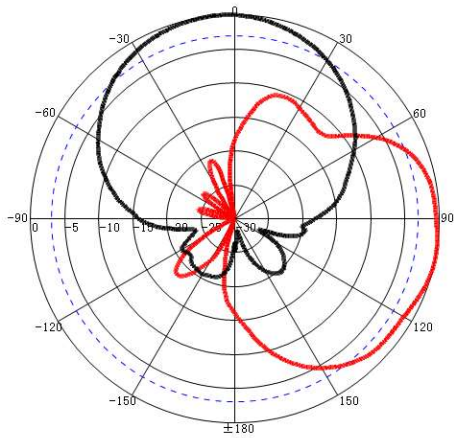
Gain:7.54dBi



Freq:2200MHz  
 Date:2015-11-19  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:-45°  
 Max:-20.70dB  
 HPBW(3dB):50.77°  
 FBR:18.05dB  
 Circularity:28.11  
 Obliquity:-10.57°

Freq:2200MHz  
 Date:2015-11-19  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:-45°  
 Max:-20.84dB  
 HPBW(3dB):64.03°  
 FBR:17.13dB  
 Circularity:23.27

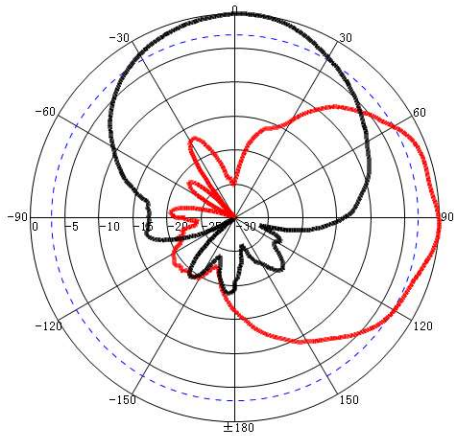
Gain:9.22dBi



Freq: 2450MHz  
 Date: 2015-11-19  
 Elevation: V-plane  
 Polar-Across: Main  
 Polarization: -45°  
 Max: 23.67dB  
 HPBW(3dB): 74.52°  
 FBR: 24.47dB  
 Circularity: 33.63  
 Obliquity: 10.72°

Freq: 2450MHz  
 Date: 2015-11-19  
 Elevation: H-plane  
 Polar-Across: Main  
 Polarization: -45°  
 Max: 22.51dB  
 HPBW(3dB): 71.15°  
 FBR: 20.61dB  
 Circularity: 15.33

Gain: 9.04dBi



Freq: 2700MHz  
 Date: 2015-11-19  
 Elevation: V-plane  
 Polar-Across: Main  
 Polarization: -45°  
 Max: 25.46dB  
 HPBW(3dB): 60.67°  
 FBR: 19.74dB  
 Circularity: 15.43  
 Obliquity: 2.21°

Freq: 2700MHz  
 Date: 2015-11-19  
 Elevation: H-plane  
 Polar-Across: Main  
 Polarization: -45°  
 Max: 26.12dB  
 HPBW(3dB): 66.89°  
 FBR: 18.81dB  
 Circularity: 19.55

Gain: 9.38dBi