

HyperLink Wireless 2.4 GHz 12 dBi Spatial Diversity/X-Pol 120° Sector Antenna Model: HG2412SXP-120

Applications

- 2.4 GHz ISM Band
- IEEE 802.11b/g/n Wireless LAN
- MIMO applications
- Public Wireless Hotspot and Wireless Video Systems
- Dual Diversity / Dual Antenna Radios

Features

- Two independent cross polarized (X-Pol) antenna arrays within one enclosure
- Spatial diversity
- All weather operation
- Heavy duty steel mounting bracket with easy elevation and tilt adjustment
- Spatial diversity/X-Pol feed system – (4) N-Female connectors



Description

The Hyperlink HG2412SXP-120 spatial diversity antenna is designed with two identical and independent cross polarized antenna arrays fed via (4) connectors. The HG2412SXP-120 provides high gain with a wide 120° beam-width making them ideal professional quality “cell site” antennas designed primarily for service providers in the 2.4GHz ISM band. Applications include IEEE 802.11b, 802.11g and 802.11n wireless LAN systems. The HG2412SXP-120 is ideal for use with wireless access points, CPEs and routers that have dual antenna ports and MIMO capabilities.

Spatial Diversity

The spatial diversity feature of this antenna is useful for operating in areas susceptible to the affects of multi-path interference. By providing spatial diversity, the radio's internal circuitry can select between the two receive antennas for better wireless reception. In the case of 802.11n or MIMO, two or more spatially or polarization diverse antennas are required for the radio to operate at its highest data rate.



Cross Polarized – X-Pol

Each of the arrays in HG2412SXP-120 feature two independent antennas with cross polarization. This feature doubles the wireless capacity over the same channels. Each array 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	2400-2500 MHz
Gain	12 dBi
Horizontal Beam Width	120°
Vertical Beam Width	16.5°
Polarization	±45°
Impedance	50 Ohm
Front to Back Ratio	> 23 dB
Port to Port Isolation	> 28 dB
Upper Sidelobe Suppression	> 15 dB
Max. Input Power	100 Watts
VSWR	< 1.5:1 avg.
Lightning Protection	DC Ground

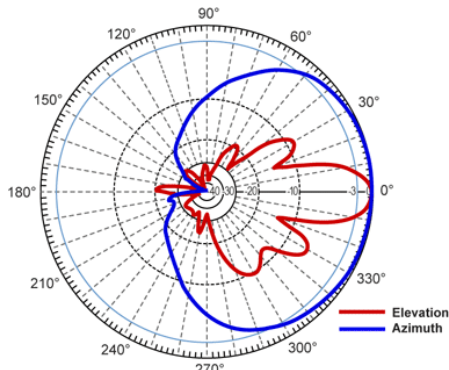
Mechanical Specifications

Connectors	(4) N-Female (2 for each X-Pol antenna array)
Weight (Including Bracket)	9.2 lbs. (4.2 Kg)
Dimensions	20.1 x 11.2 x 3.3 in (512 x 285 x 85 mm)
Radome Material	UV-inhibited Polymer
Radome Color	Light Grey
Mounting Mast Size (Dia.)	1.6-2.4 in (40-60mm)
Operating Temperature	-40° C to 60° C (-40° F to 140° F)
RoHS Compliant	Yes

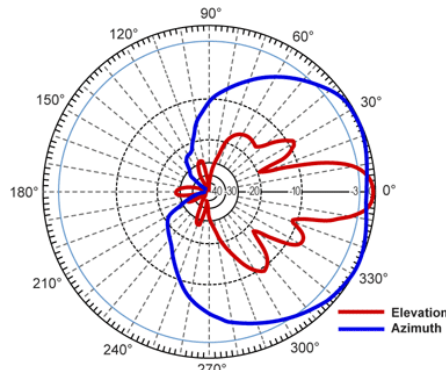
Wind Loading Data

Wind Speed (MPH)	Loading – Front	Loading – Side
100	80 lbs	23 lbs
125	126 lbs	37 lbs

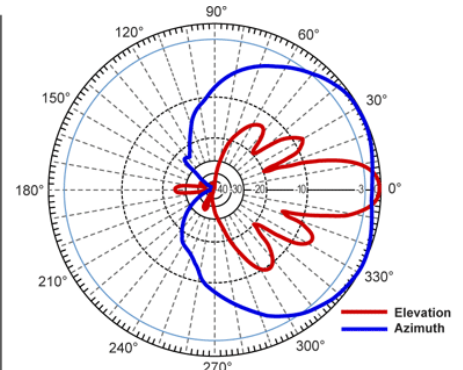
Antenna Patterns



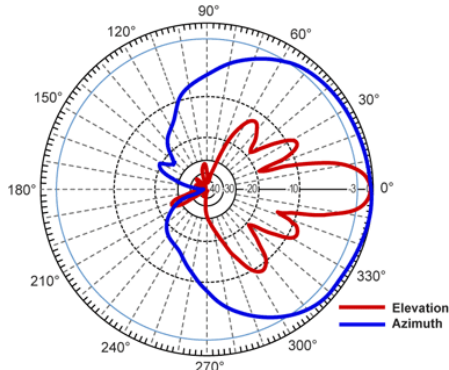
+45° - 2400 MHz



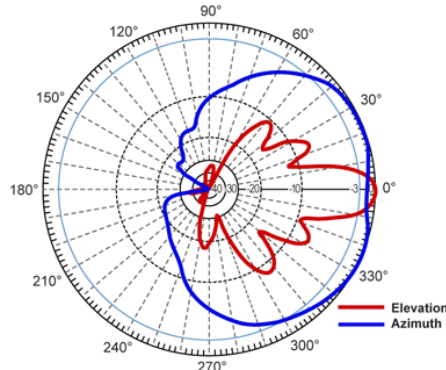
+45° - 2450 MHz



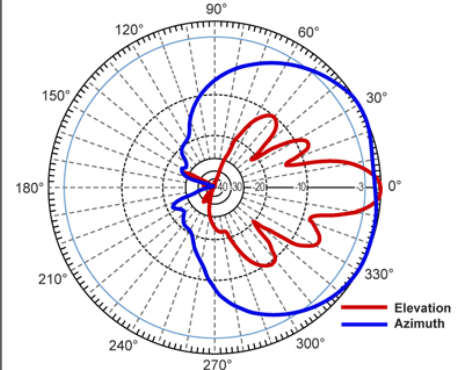
+45° - 2500 MHz



-45° - 2400 MHz



-45° - 2450 MHz



-45° - 2500 MHz