

# HyperLink Wireless 2.4/ 5 GHz Dual Band / Dual Polarized Omni Antenna Model: HG2458-09DPU2

# **Applications**

- 2.4/5 GHz IEEE 802.11a/b/g and 802.11ac applications
- Supports 1x2 and 2x2 MIMO AP/Routers
- WiMax, WISP and WiFi applications
- Wireless video systems
- Point-to-multipoint applications

#### **Features**

- MIMO Multiple-Input and Multiple-Output
- Dual polarity/dual frequency feed system in single enclosure
- Separate inputs horizontal and vertical polarization
- UV-Resistant radome for all-weather operation
- Heavy duty industrial grade design



## Description

The HyperLink HG2458-09DPU2 is a professional high gain dual band/dual polarity omnidirectional base station antenna designed and optimized for 2.4 and 5 GHz frequencies. This antenna is ideally suited for multipoint applications where long range and wide coverage is desired.

#### **Dual Frequency / Dual Polarized**

The HG2458-09DPU2 is actually two antennas in one, a 2.4/5 GHz horizontal polarized antenna and a 2.4/5 GHz vertical polarized antenna together in a single radome. Each polarization features separate dual band feeds, two N-Female connectors in total.

This antenna incorporates advanced dual polarization technology that allows for the interoperability of two radio transmit and receive paths. This technology allows for the attenuation of unwanted signals from adjacent channels and/or co-located equipment.

#### **Rugged and Weatherproof**

The HG2458-09DPU2 construction features a heavy-duty UV resistant PVCs radome for

durability and aesthetics. Designed to operate in the harshest of environments, the HG2458-09DPU2 far exceeds other omnidirectional antennas. The included mounting system features twin heavy-duty mounting clamps and bolts for superior strength.





# Specifications

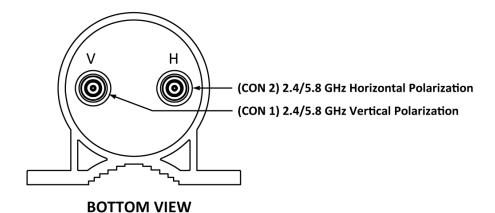
# **Electrical Specifications**

Frequency Range	2400-2500 MHz	5100-5800 MHz
Polarization (See Connection Diagram Below)	Vertical (CON 1) / Horizontal (CON 2)	
Gain	6 dBi	9 dBi
Vertical Beam Width (-3 dB)	30°	12°
Horizontal Beam Width	360°	
Impedance	50 Ohm	
Max. Input Power	100 Watts	
VSWR	≤ 1.6	≤ 1.9
Isolation	> 28 dB	
Lightning Protection	DC Ground	

#### **Mechanical Specifications**

Connector	(2) N-Female
Weight	6.5 lbs (2.95 kg)
Length	38.3 in. (974 mm)
Radome Diameter	2.9 in. (75 mm)
Radome Material	UV Resistant PVC
Mounting Mast Size (Dia)	1.6 to 3.5 in. (40 to 90 mm)
Operating Temperature	-40° C to 60° C (-40° F to 140° F)
Max. Wind Velocity	130 mph (210 km/h)
RoHS Compliant	Yes

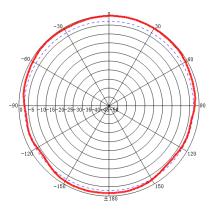
# **CONNECTION DIAGRAM**



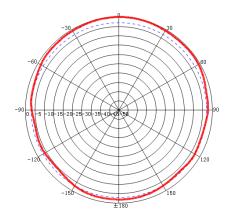


#### **RF Antenna Patterns**

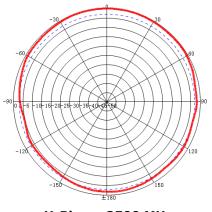
#### **Horizontal Polarization**



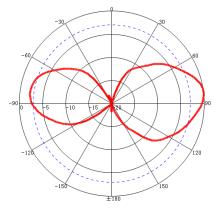
H-Plane: 2400 MHz



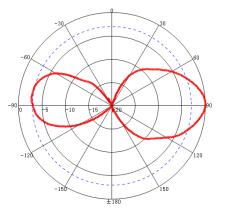
H-Plane: 2450 MHz



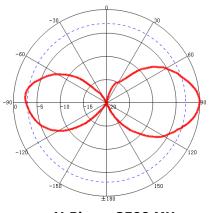
H-Plane: 2500 MHz



V-Plane: 2400 MHz



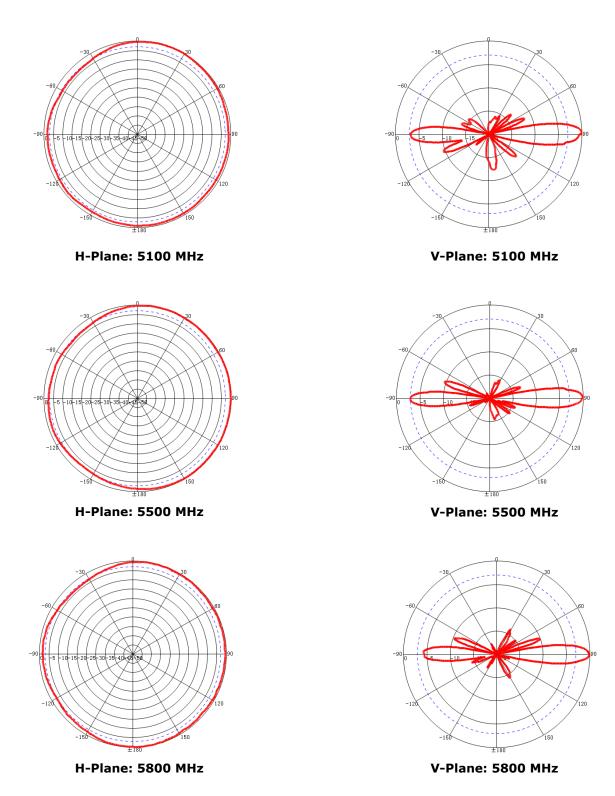
V-Plane: 2450 MHz



V-Plane: 2500 MHz

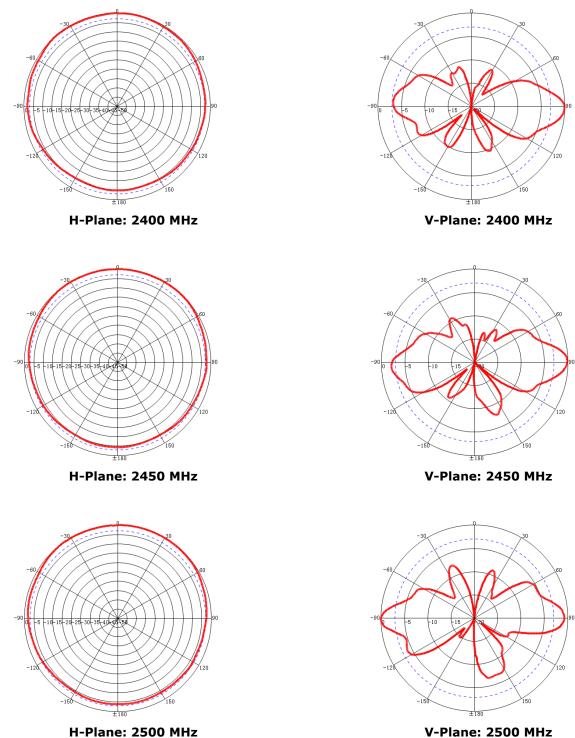


# **Horizontal Polarization**





# **Vertical Polarization**

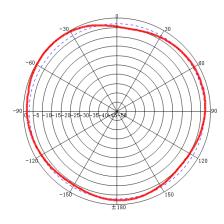


V-Plane: 2500 MHz

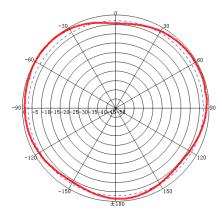
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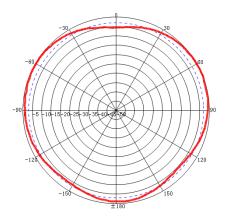
# **Vertical Polarization**



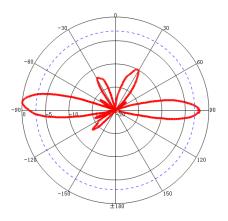
H-Plane: 5100 MHz



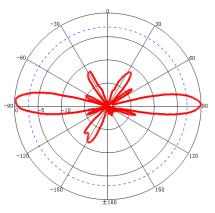
H-Plane: 5500 MHz



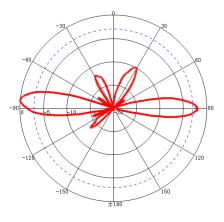
H-Plane: 5800 MHz



V-Plane: 5100 MHz



V-Plane: 5500 MHz



V-Plane: 5800 MHz