

3.5-3.8GHz, 15 Degree Flat Panel Antenna,  
20 dBi, 2-Port, ±45 Slant Polarization



## HG3520DP

### Features

- 2 x 2 MIMO – Multiple-Input and Multiple-Output
- Dual ±45 slant polarization ports with integral N-female connectors in a single enclosure
- UV-resistant radome and rugged mounting hardware for all-weather operation
- Stable 20 dBi gain in a small-profile 15" x 15" x 1" form factor
- Suppressed side lobes and superior front to back reduces interference for point-to-point links in the CBRS band

### Applications

- 3.5 GHz Citizens Broadband Radio Service (CBRS) applications
- Wireless LAN systems & IEEE 802.16e applications
- Mobile WiMAX Wireless Internet Provider "cell" sites
- SOFDMA
- Outdoor or indoor point-to-point (PtP) requiring high gain

### Description

**Superior Performance:** The L-COM Brand HG3520DP Flat Panel Antenna combines two ports with dual ±45 slant polarization, high 20 dBi gain with a 15 degree beamwidth in a single enclosure with one mounting point. It is a professional quality antenna designed primarily for 2x2 MIMO point-to-point or point-to-multipoint applications in the 3.5 GHz Citizens Broadband Radio Service (CBRS) frequency band. This antenna incorporates advanced low PIM, dual polarization technology that allows for the interoperability of two 2x2 radios with multiple transmit and receive path. The small 15" x 15" x 1" flat panel limits the wireless infrastructure footprint and provides high gain for stable PtP links. This antenna supports LTE deployments in the CBRS 3.5 - 3.8 GHz spectrum.

**Rugged and Weatherproof:** The 2-port flat panel antenna features a heavy-duty UV-resistant plastic radome for all-weather operation. The heavy-duty, powder-coated mounting brackets is polarization adjustable between horizontal/vertical and ±45 slant polarization and allows installation with pipe diameter from 1.2" to 2". This CBRS flat pane antenna is built to withstand speeds of up to 130 mph and survive in a wide-range of challenging environments.

### Configuration

Design	Panel
Application Band	CBRS
Band Type	Single
Radiation Pattern	Directional
Polarization	H/V or 45 Deg. Slant
Connector Type	N Female
Number of Ports	2

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	3.5		3.8	GHz
Input VSWR		1.3:1	1.5:1	
Impedance		50		Ohms
Gain		20		dBi
Front to Back Ratio		25		dB
Electrical Downtilt		0		Degrees

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[3.5-3.8GHz, 15 Degree Flat Panel Antenna, 20 dBi, 2-Port, ±45 Slant Polarization HG3520DP](#)

3.5-3.8GHz, 15 Degree Flat Panel Antenna,  
20 dBi, 2-Port, ±45 Slant Polarization



## HG3520DP

Cross Polarization Ratio	15		dB
Horizontal (Azimuth) HPBW		15	Degrees
Horizontal Squint		±1	Degrees
Vertical (Elevation) HPBW		16	Degrees
Input Power		50	Watts

### Mechanical Specifications

Radome Material	UV protected ABS
<b>Size</b>	
Length	15.2 in [386.08 mm]
Width	15.2 in [386.08 mm]
Height	1.2 in [30.48 mm]
Mounting Mast Diameter	1.2 to 2 in [30.48 to 50.80 mm]
Weight	3.3 lbs [1.5 kg]
Mechanical Specification Notes: Radome material is UV-resistant ABS.	

### Environmental Specifications

<b>Temperature</b>	
Operating Range	-40 to +140 deg C
Wind Survivability	130 MPH [209.21 KPH]
Wind Loading	45 lbs at 130 mph

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

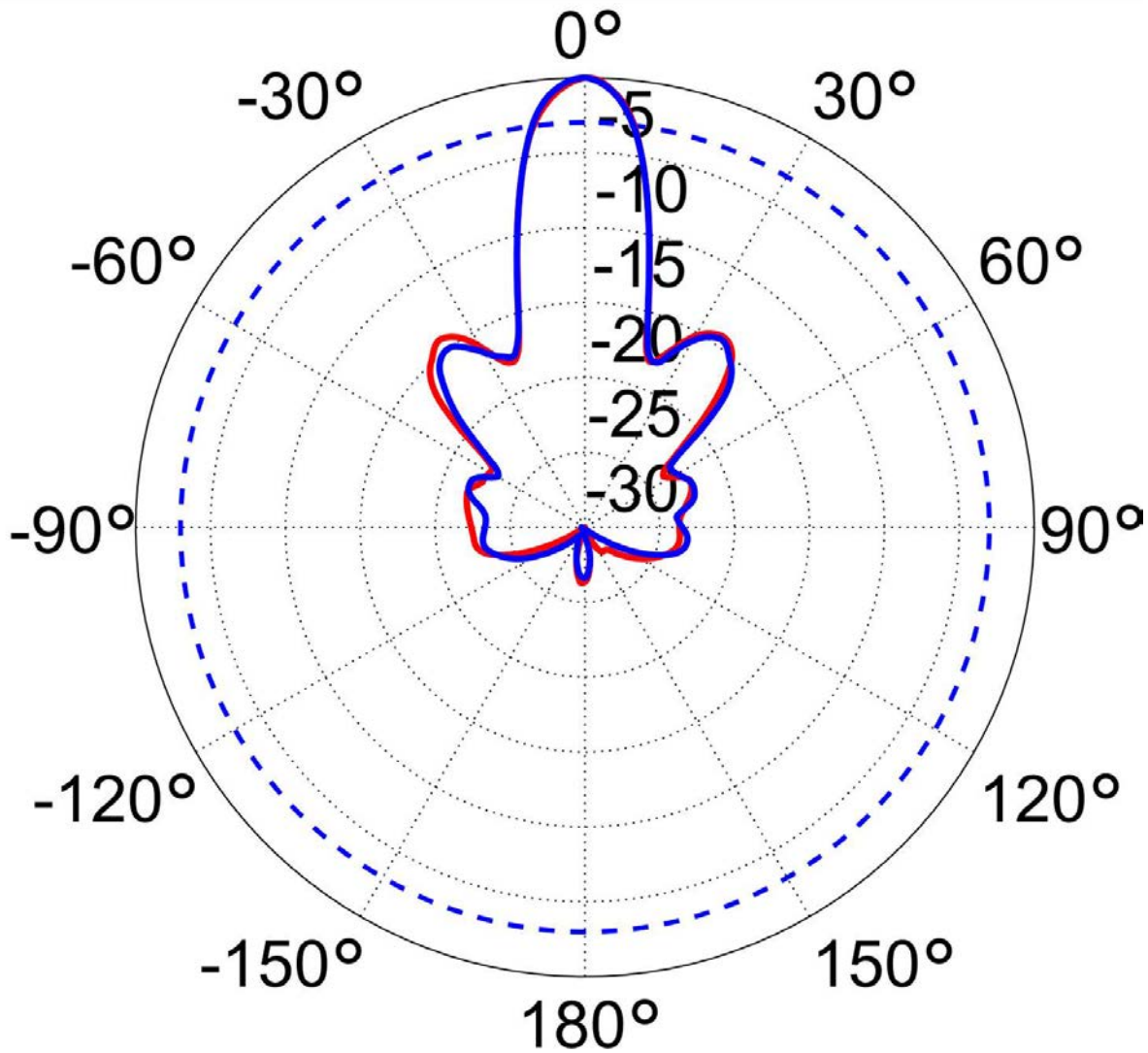
Notes:

3.5-3.8GHz, 15 Degree Flat Panel Antenna,  
20 dBi, 2-Port, ±45 Slant Polarization



**HG3520DP**

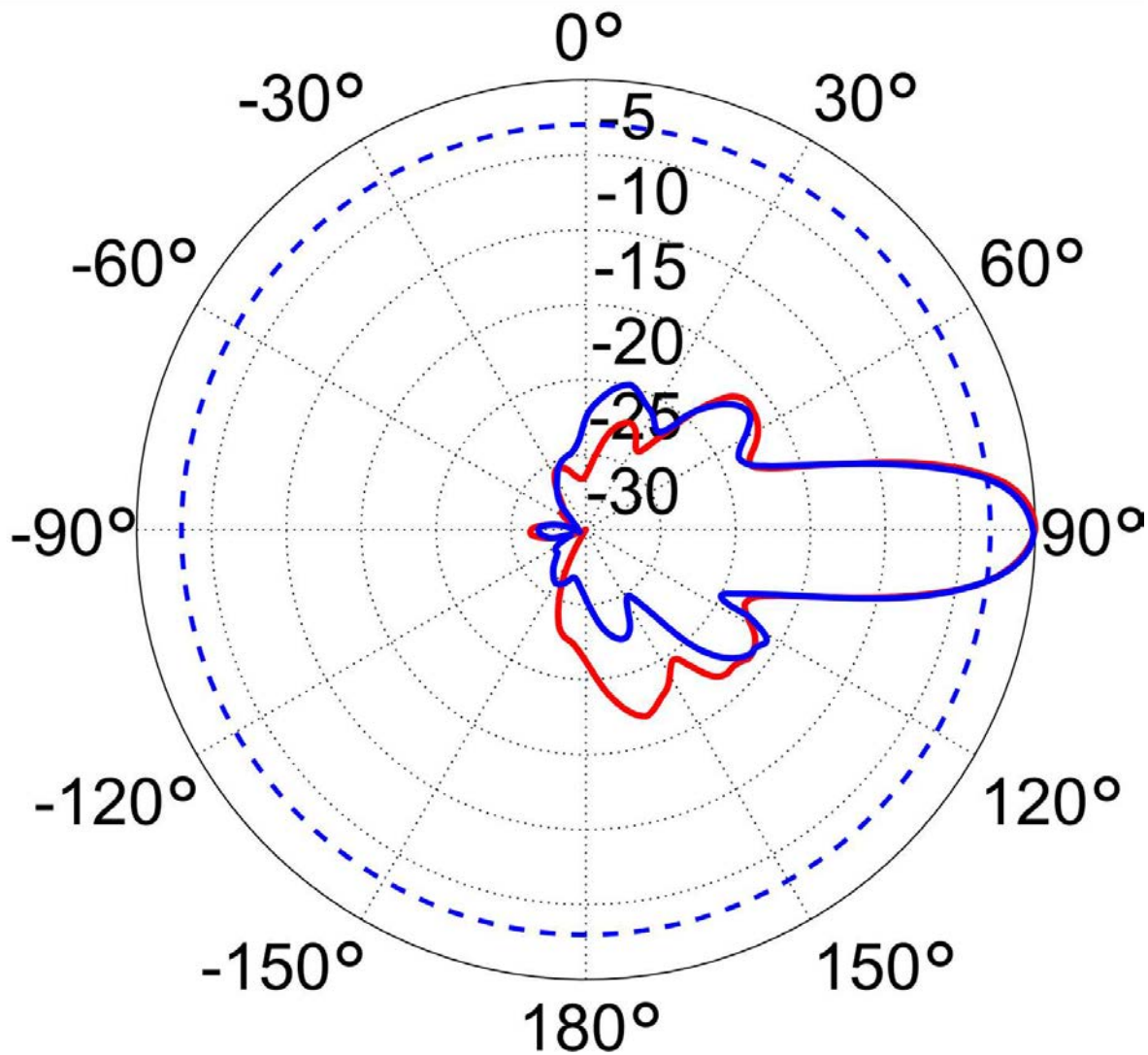
Typical Radiation Pattern



3.5-3.8GHz, 15 Degree Flat Panel Antenna,  
20 dBi, 2-Port, ±45 Slant Polarization



**HG3520DP**



3.5-3.8GHz, 15 Degree Flat Panel Antenna, 20 dBi, 2-Port, ±45 Slant Polarization from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and

3.5-3.8GHz, 15 Degree Flat Panel Antenna,  
20 dBi, 2-Port, ±45 Slant Polarization



## HG3520DP

---

surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

# 3.5-3.8GHz, 15 Degree Flat Panel Antenna, 20 dBi, 2-Port, ±45 Slant Polarization

## L-com CAD Drawing

