

PRODUCT SPECIFICATION

Part No.	CGMA105
Product Name	L1/L2 Dual Band Right Handed Circular Polarized Stacked Patch Antenna 1200/1590 MHz
Features	L1/L2 Dual band high gain circular polarization antenna for GPS/GNSS applications. Covers dual-band L1/L2: L1 Band: 1559~1606 MHz L2 Band: 1197~1249 MHz RHCP gain up to 4.6 dBic RoHS Compliant



INTRODUCTION

The CGMA105 antenna is a circularly polarized high gain antenna used for satellite based communications such as GPS and GNSS. It is designed to be mounted directly on a PCB. Additional circuit to apply phases in each port can be added.

Typical applications

- Enhanced GPS/GNSS satellite communications.
- Any device for location detection service
- Best product for RTK (Real Time Kinematic positioning) for precise position detection

This antenna delivers best in class antenna gain technology for satellite navigation systems such as GNSS to support both L2 and L1 bands at 1,590MHz and 1,200MHz.

Satellite navigation applications of today demand higher circular gain than ever before. Higher gain antennas with high circularity are necessary to achieve the better position detection for these next generation satellite based position detection systems such as RTK (Real Time Kinematic Positioning). By using its patented antenna technology, SkyMirr is able to build higher gain and low AR (Axial Ratio) solutions as compared to currently available antennas.

The CGMA105 antenna has been carefully designed to work equally well in both L1 band as well as L2 band. This allows for better position detecting as the world requires more precise location detection services in Automotive, IoT, Military, and more applications.

Additional circuit to provide phases in each antenna port may be necessary to achieve circular polarization in radiation. For further services including the circuit design, please contact the SkyMirr sales office (sales@skymirr.com or +1. 321.393.1039).

SPECIFICATIONS

Electrical and patch size					
No.	Item	Specification		Unit	Remark
		L1 band	L2/E5b band		
1	Frequency	1559.0~1606.0	1179.0~1249.0	Mhz	Note1
2	Polarization	RHCP	RHCP	-	Note1
3	Gain @ Zenith	Typ. 2.3~4.6	Typ. 2.2~4.5	dBic	Note1
4	Axial Ratio	Typ. 3.0@Zenith	Typ. 3.0@Zenith	-	Note1
5	Bandwidth @ 10dB	200 min	200 min	Mhz	Note1
6	Impedance	50		ohm	Note1
7	Patch size	Φ41 x 4t and Φ41 x 5t		mm	Note1

※ Note 1 : Measured on the 150 x 150mm ground plane with case.

Dimension

