

# Helical Antenna Specification

**Product Name:** Helical Antenna

**Product Model:** VLG-GGB-R35Q2

**Satellites Signal Tracking:** GPS L1/L2 , BDS B1/B2/B3 , GLONASS L1/L2



## Product Description

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Spiral active antennas covering GPS L1/L2, BDS B1/B2/B3 and GLONASS L1/L2 are widely used in navigation scheduling, tracking monitoring, measurement and control or other fields.

Especially suitable for many applications such as UAV, aerial photography, traffic monitoring, remote sensing, etc., it can also be used in various handheld terminals, high-precision modules, etc.

## Technical Features

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1. Adopts a four-arm spiral structure to ensure small errors in the phase center and geometric center of the antenna, which can effectively reduce the measurement errors.
2. High gain, wide beam and good reception effect for low elevation signal.
3. Small size and power consumption, light weight and wide application, could effectively ensure the battery working time of devices.

## Electrical Performance Indicators

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Antenna	
GPS	L1, L2
GLONASS	L1, L2
BeiDou	B1, B2, B3
VSWR Output	$\leq 2 : 1$
Input Impedance	$50\Omega$
Polarization	Right-hand circular polarization
Axial Ratio ( $90^\circ$ )	$\leq 3\text{dB}$
Antenna gain( $90^\circ$ )	$\leq 2\text{dB}$
Horizontal coverage angle ( $^\circ$ )	$360^\circ$ omnidirectional
LNA	
LNA Gain	$35\text{dB} \pm 2\text{dB}$
Noise Figure	$\leq 2\text{dB}$
VSWR Output	$\leq 2 : 1$
Operation Voltage	$3 - 5\text{VDC}$
Operation Current	$\leq 20\text{mA}$
Passband Ripple	$\pm 2\text{dB}$
Impedance	$50\Omega$
Physical	
Dimension	$\phi 27.5 \times 57\text{ mm}$
Connector Type	SMA-J
Weight	$\leq 25\text{ g}$
Environmental	
Operating Temperature	$-40^\circ\text{C}$ to $+70^\circ\text{C}$
Storage Temperature	$-40^\circ\text{C}$ to $+70^\circ\text{C}$
Humidity/Work Temperature	95% No-condensing

## Structural Properties

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