

# Four-star full-frequency four-arm helical antenna SSY3701B

## Product introduction



The antenna adopts a four-arm spiral structure with a relatively stable phase center, which reduces the influence of the antenna on the measurement error;

The antenna gain is high, the beam pattern is wide, and the effect of receiving low elevation signals is good, ensuring that the antenna can receive the satellite in different attitudes;

The antenna is equipped with a high-band out-of-band suppression low-noise amplifier circuit, which can effectively resist external electromagnetic interference, and has low power consumption to ensure the endurance of the device;

The antenna is small in size and light in weight, and is suitable for use on various devices that require antenna weight, such as drones and various handheld terminals.

## Application

This antenna is a Samsung seven-band four-arm helical antenna covering GPS L1 / L2, BDS B1 / B2 / B3, GLONASS L1 / L2, Galileo E1/E5. It has the characteristics of small size and light weight. It is widely used in navigation scheduling, tracking monitoring, measurement and control And other fields. Based on the four-arm helical antenna's low requirements for antenna attitude, it is especially suitable for many applications such as drone, such as aerial photography, traffic monitoring, remote telemetry, etc., and can also be applied to various handheld terminals, high-precision positioning modules, etc. .

## Technical parameter

Electrical Specifications	
Frequency Range(MHz)	GPS L1、BDS B1、GLONASS L1：1559~1602 Galileo: E1 GPS L2、BDS B2/B3、GLONASS L1：1207~1278 Galileo :E5
Polarization	Right-hand circular
Gain (dBi)	90°≥2
Axial Ratio (dB)	90°≤3
LNA Gain(dB)	36±2
V.S.W.R	<2.0: 1

Noise Figure (dB)	<2.0
DC Voltage (V)	3.3~18
Current (mA)	<30
Impedance( $\Omega$ )	50
<b>Mechanical Specifications</b>	
Dimensions(mm)	$\Phi 28 \times 58.5$
Connector	SMA-J
Weight (g)	<25
Waterproof status	IP67
<b>Environment Specifications</b>	
Relative Humidity	95%
Operating Temperature ( $^{\circ}\text{C}$ )	-40~+75
Storage Temperature ( $^{\circ}\text{C}$ )	-55~+85
Antenna total gain	40dbi

Product size drawing (unit: mm, uninjected tolerance is  $\pm 0.3\text{mm}$ )

