

## SPK-6E GNSS Helical Triband Antenna

The SPK-6E is a multi-frequency high precision GNSS helical antenna compatible with GPS, GLONASS, BeiDou, and Galileo systems. It is suitable for high precision geodesy in UAV, handheld, robotic, and many other applications.

**Compact.** At just under 60mm and 18 grams, the SPK-6E is an excellent balance of light weight and small size where portability is key.

**Tri-Band.** The unique helical design allows reception on most modern GNSS bands including GPS L1/L2/L5, GLONASS G1/G2, BeiDou B1/B2a/B2b, and Galileo E1/E5a/E5.

**Protected.** The antenna is IP67 rated and includes a compressive o-ring built into the base to protect the SMA interface against the harshest conditions.



### TECHNICAL PARAMETERS

Passive antenna parameter				
Constellation Signals	GPS L1/L2/L5	GLONASS G1/G2	BeiDou B1/B2a/B2b	Galileo E1/E5a/E5b
Max gain	L1≥2.0dBi L2≥1.0dBi L5≥1.5dBi	G1≥0.5dBi G2≥-2dBi	B1≥2.0dBi B2a≥1.5dBi B2b≥0.0dBi	E1≥2.0dBi E5a≥1.5dBi E5b≥0.0dBi
Polarization	RHCP			
Frequency	1150-1278MHz and 1550-1610MHz			
Elevation Coverage	360°			
Output impedance	50Ω			
VSWR	≤2.0			
Axis ratio	≤3dB			
Antenna Phase Center	37.5mm			
LNA parameter				
Active gain	35±2dB			
Noise figure	≤1.5dB			
Input VSWR	≤2.0			
Output VSWR	≤2.0			
Supply Voltage	3~5.5V			
Working Current	≤46mA			
Mechanical Characteristics				
Size	27.5 x 59.7mm			
Connector	SMA			
Weight	≤20g			
Waterproof Rating	IP67			

### Operating Environment

Operating Temperature	-45°C ~ +70°C
Storage Temperature	-55°C ~ +85°C
Humidity	95% non-condensing

## DIMENSIONAL DRAWING

