

SPK-6E GNSS Helical Triband Antenna

The SPK-6E is a multi-frequency high precision GNSS helical antenna compatible with GPS, 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, 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	BeiDou B1/B2a/B2b	Galileo E1/E5a/E5b
Max gain	L1≥2.0dBi L2≥1.0dBi L5≥1.5dBi	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		
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

