

# 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.

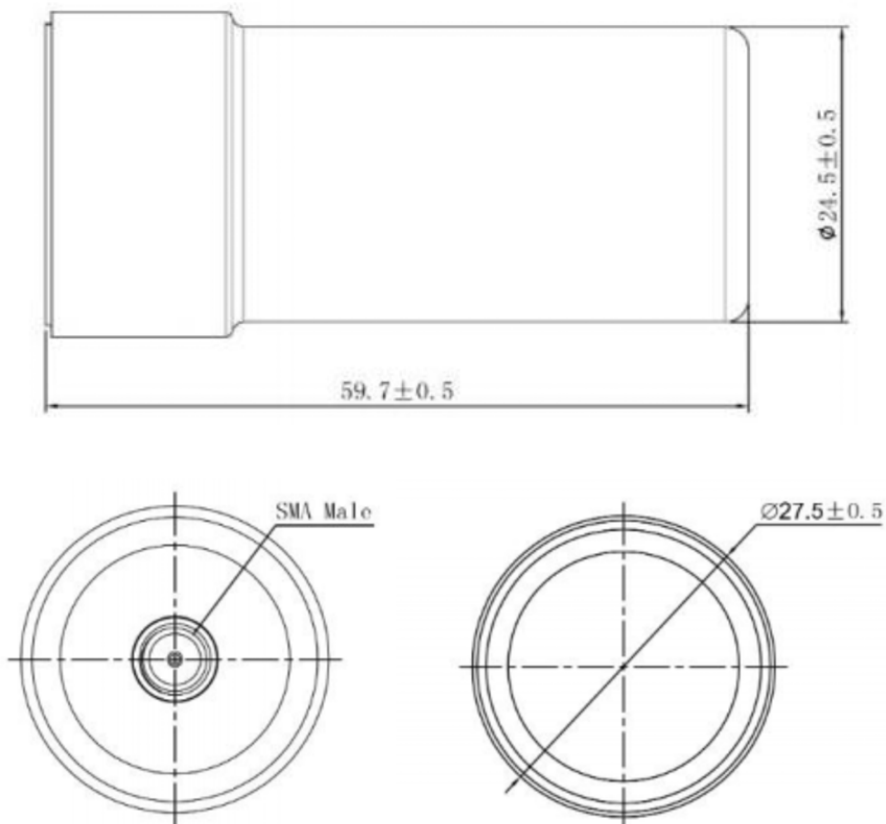


## TECHNICAL PARAMETERS

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



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[SparkFun Electronics:](#)

[GPS-23847](#)