

Commodity Description	Specification
GNSS SURVEY ANT/LS-125-A	160*66.5mm/3~12V/SMA



## 1. Product Introduction

LS-125-A is a four-star multi-frequency satellite navigation antenna. The antenna has the characteristics of high gain, miniaturization, high sensitivity, multi-system compatibility and high reliability, which can effectively meet the needs of users.

- Multi-feed point design and fully symmetrical antenna structure, with a very stable phase center, reducing the measurement error of the antenna pair.
- The gain is high, the standing wave ratio is low, and the effect of receiving low-elevation signals is obvious, and the star can be received normally in the occasion of severe occlusion.
- Equipped with anti-multipath choke plate, with anti-surge design, which can effectively suppress strong interference signals outside the band to ensure the reliability of the antenna
- Using anti-ultraviolet PC material design, which is both beautiful and ensures that the antenna shell will not change color for a long time outdoor use. It has IP67 waterproof rating, high temperature resistance, sun protection and UV protection.

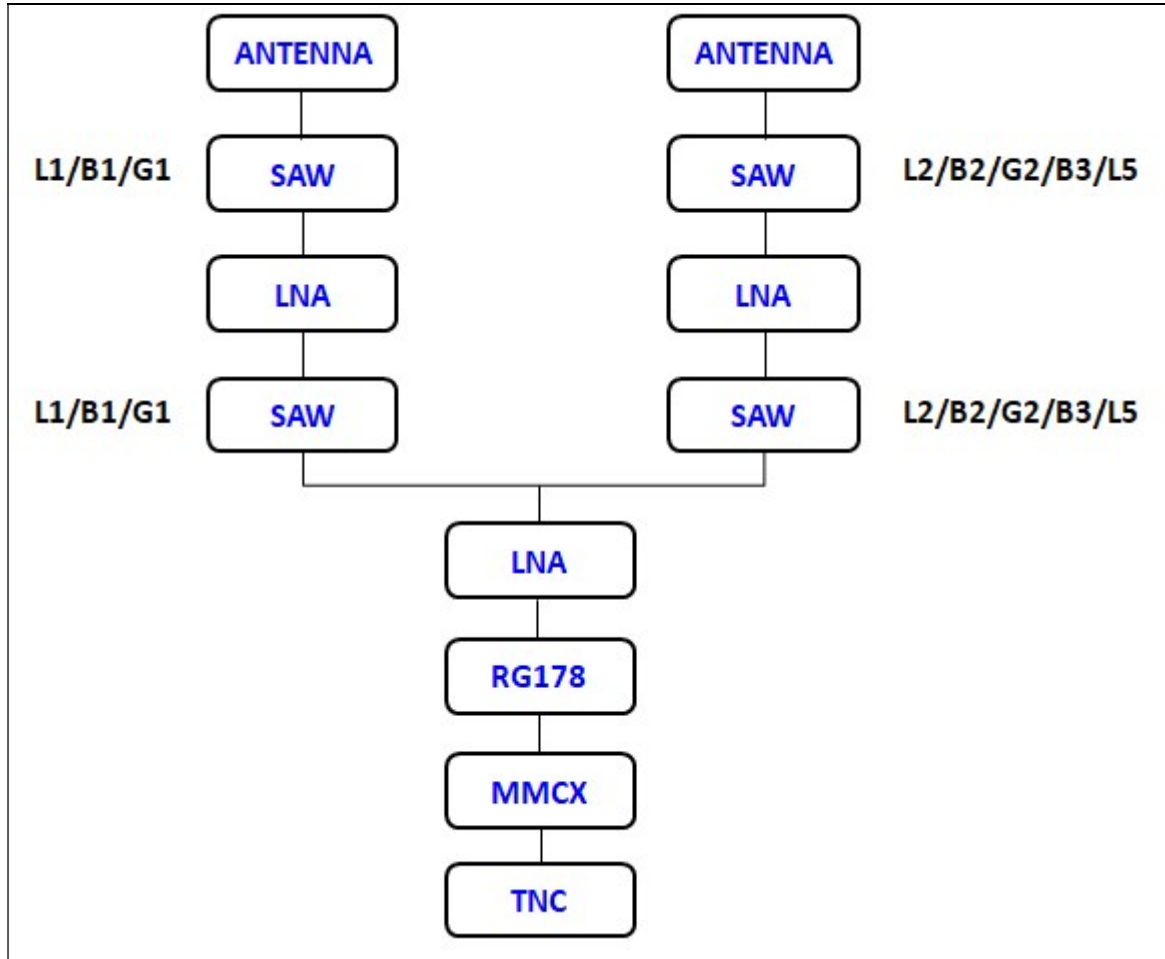
## 2. Application Area

This antenna covers the four-star multi-frequency external flying saucer antenna of GPS L1/L2/L5, GLONASS L1/L2/L3, BDS B1/B2/B3, GALILEO E1/E5a/E5b/E6, SBAS L1/L5 QZSS L1/L2/L5/L6, IRNSS L5, L-Band which meets the needs of multi-system compatible and high-precision users of current GNSS measuring equipment. It is widely used in geodesy surveying, navigation surveying, navigation, precision agriculture and marine surveying. It can also be applied to the military field according to the application conditions.

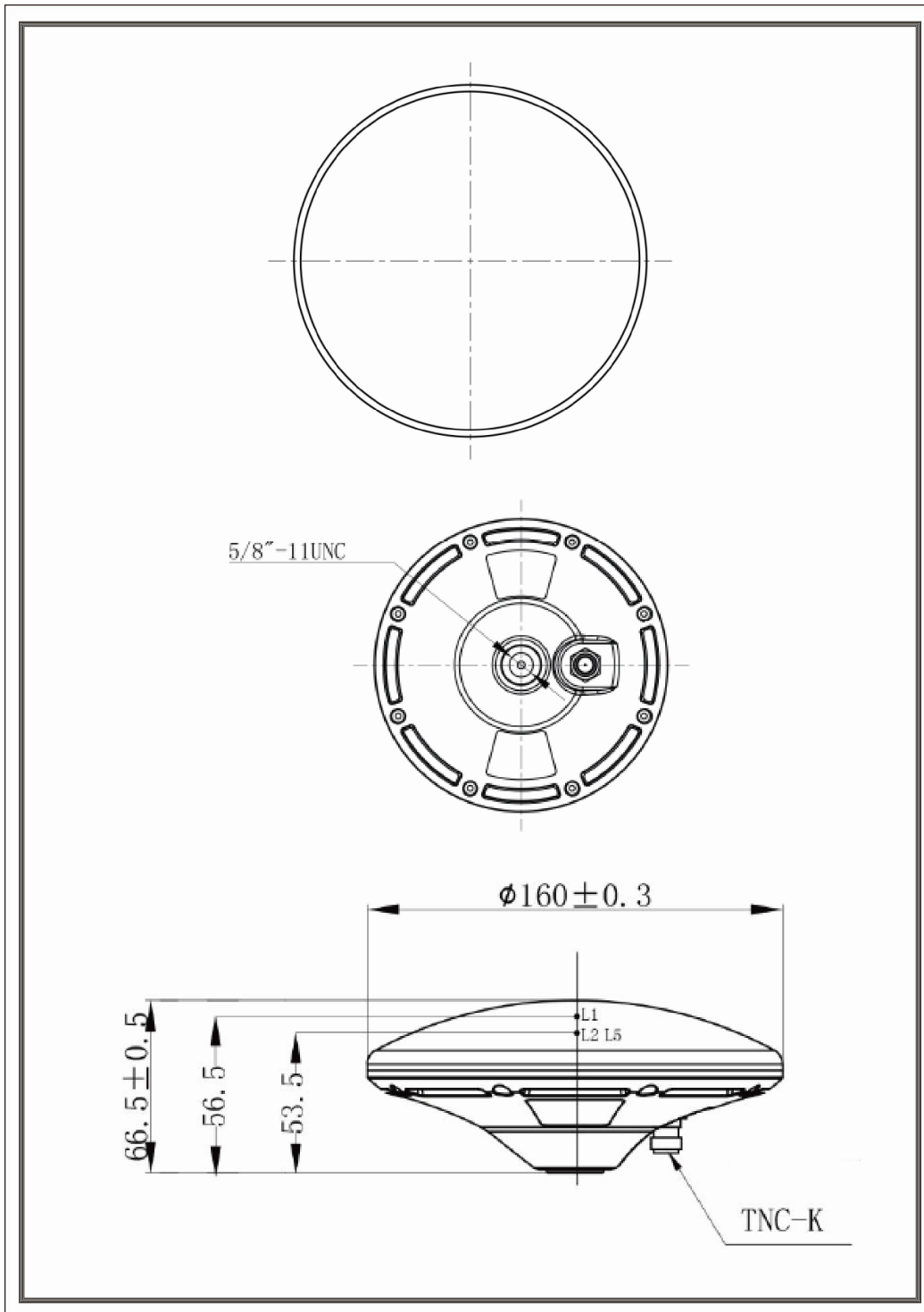
### 3. Specifications

Antenna Specifications	
Frequency Range (MHz)	GPS L1/L2/L5 GLONASS L1/L2/L3 BDS B1/B2/B3 GALILEO E1/E5a/E5b/E6 SBAS L1/L5 QZSS L1/L2/L5/L6 IRNSS L5 L-Band
Gain (dBi)	<5.5
Antenna AR (dB)	≤3.0
Horizontal coverage angle	360°
VSWR	≤2.0
Phase center error (mm)	±2
Polarization	Right-hand circular polarization
Port Impedance	50Ω
Electrical Specifications	
LNA Gain (dB)	40±2
Noise figure (dB)	≤1.8
VSWR	≤2.0
In-band flatness ( dB )	±2
Operating voltage (V)	3.0V-12.0 V
Operating current	≤45mA
Differential propagation delay(ns)	≤5
Structural Characteristics	
Connector type	TNC-K
Antenna size (mm)	Φ160*66.5
Weight (g)	400
Working Environment	
Operating temperature (°C)	-40 - +85
Storage temperature (°C)	-55 - +85
Waterproof grade	IP67

**4. Block Diagram**

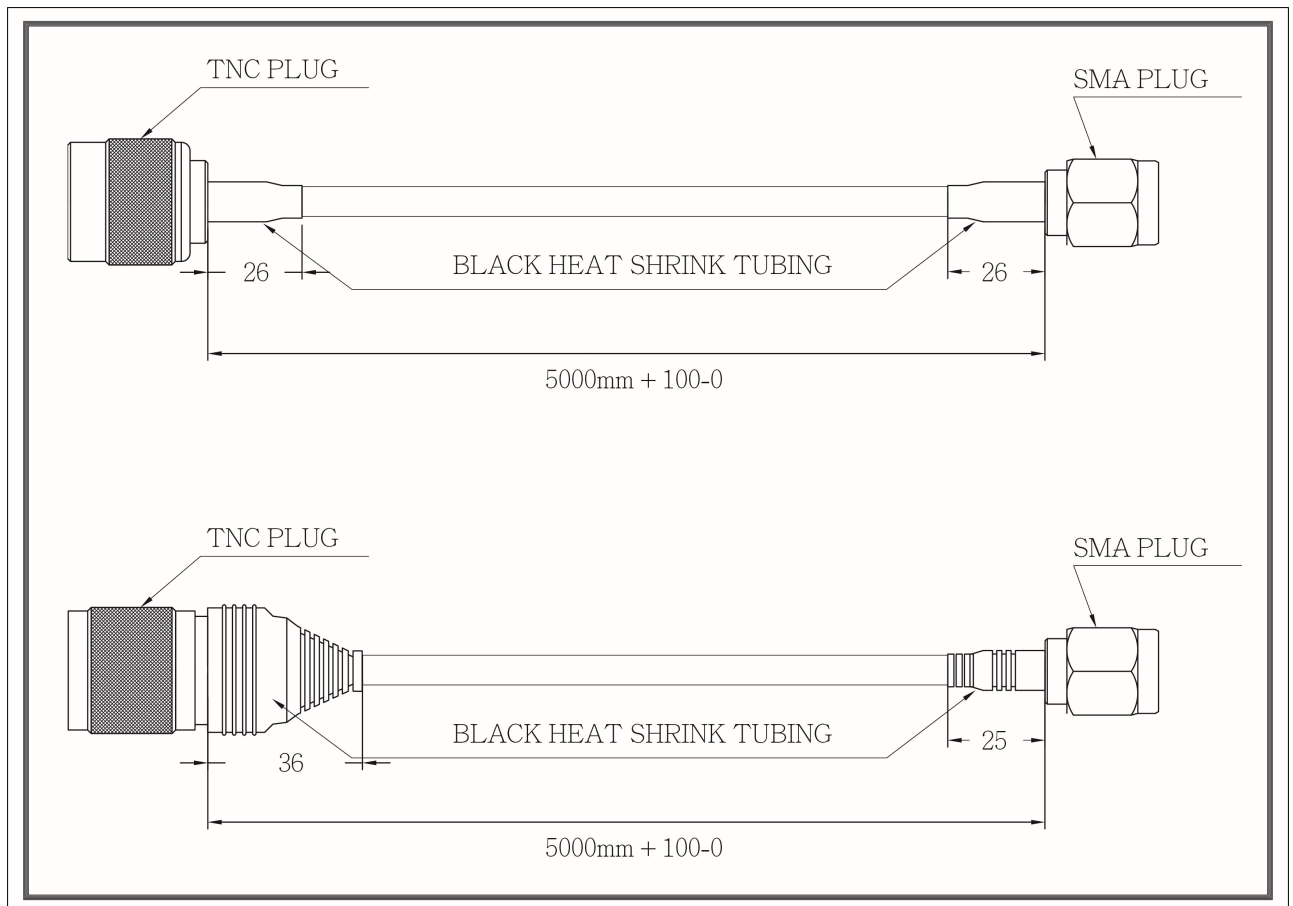


**5. Product Dimension**



## 6. Accessory

### 5.1 5M Cable



*<Note> Will provide one of above when customer purchased.*

**5.2 METAL BASE MOUNTING**

