

GNSS Full-band Survey Antenna

KV- P100

Description

KV-P100 is a four-system full-band high-precision surveying antenna supporting GPS/BDS/GLONASS and GALILEO, which can meet the needs of BeiDou III and Multi-system compatibility of measurement equipment, it can be widely used in surveying and mapping, marine surveying, geological monitoring, bridge deformation monitoring, automated harbor, UAV and unmanned vehicle applications.

Technical Features

1. Passive antenna with high gain, wide beam width, low elevation angle signal reception effect is good, can receive satellite signal in serious blocking environment;
2. Passive antenna with wide working band can support multi-system & multi-frequency points well, especially the global networking B3 frequency point and L5, L-band frequency point, greatly improving the stability of the system;
3. Antenna out-of-band rejection is high, can effectively avoid base station and other signal interference caused by system instability;
4. Compact and reliable shell structure, IP67 waterproof, dustproof and ultraviolet shell, can meet the requirements of long-term use in variety of harsh outdoor environments.

Applications

- Surveying and mapping
- Bridge deformation monitoring
- Driving test and training
- Earthquake monitoring
- Automated dock operation
- Intelligent driving

Technical parameters

Passive antenna characteristics

Frequency Range	BDS: B1/B2/B3 GPS:L1 /L2/L5 GLONASS: G1/G2/G3 GALILEO : E1/E5a/E5b/E6 L-Band	Polarization	RHCP
Antenna Impedance	50Ω	Antenna axis ratio	≤3dB
		Azimuth coverage	0°~360°
		VSWR	≤1.5
		Maximum gain	5.5dBi
		Phase center error	±2mm

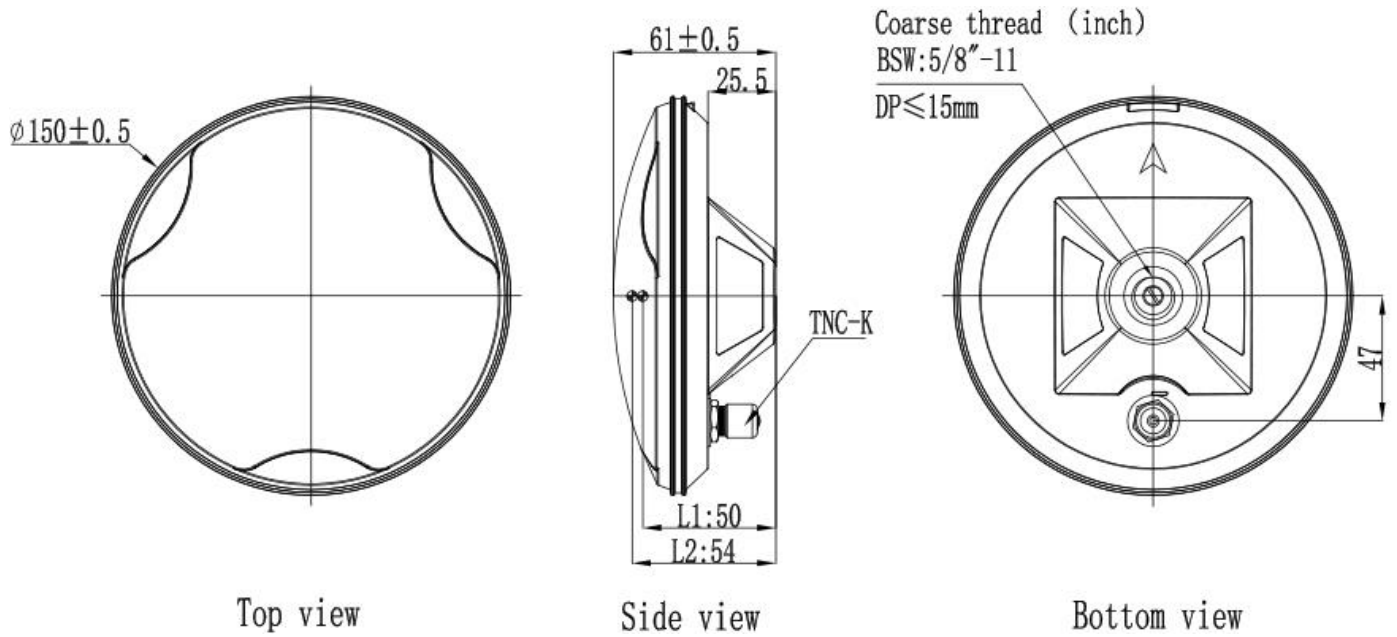
Low Noise Amplifier Characteristics

LNA Gain	L1: 38±2dB ;L2: 40±2dB	Passband ripple	±2dB
Noise figure	≤1.8dB	Operating voltage	DC3.3~12V
VSWR	≤2.0	Operating current	≤50mA

Structural and environmental adaptability

Dimensions	Φ150*61mm	Waterproof rating	IP67
Weight	≤450g	Operating TEMP	-40℃~+85℃
Connector	TNC-K	Storage TEMP	-55℃~+85℃
Mounting	5/8"×11 (Inch)	Storage humidity	95% non-condensing

Structural drawing (dimensional tolerances ± 0.3 mm not noted)



Documentation

Serial No.	Contents	Version	Date
1	All chapters	V1.0	2023-2-26
2			
3			
4			

Prepared by:

Checked by:

Approved by: