

GNSS Reference Station Antenna

EV004



Description

EV004 is a multi-system full-frequency reference station antenna covering BDS, GPS, GLONASS and GALILEO. With unique choke structure design, this product has obvious features such as stable phase center, good multi-path suppression effect, high positioning accuracy and good low elevation angle reception.

Technical Features

1. Phase center accuracy to sub-millimeter level, high stability, and good repeatability;
2. Small size and light structure;
3. Unique choke and choke plate design, with excellent multi-path suppression effect;
4. High gain at low elevation angle and strong satellite tracking capability;
5. IP67 level waterproof and dust proof, can work normally in outdoor for years.

Application

- Survey and mapping
- Earthquake monitoring
- Bridge deformation monitoring
- Automatic operation of docks
- Global navigation satellite system reference

Technical parameters

Passive antenna characteristics

Frequency Range	BDS:B1/B2/B3	Polarization	RHCP
	GPS:L1/L2/L5	Antenna axis ratio	≤2dB
	GLONASS:L1/L2/L3	Azimuth coverage	0°~360°
	GALILEO:E1/E5a/E5b/E6	VSWR	≤1.5
	L-Band	Maximum gain	6dBi
Antenna Impedance	50Ω	Phase center error	±1mm

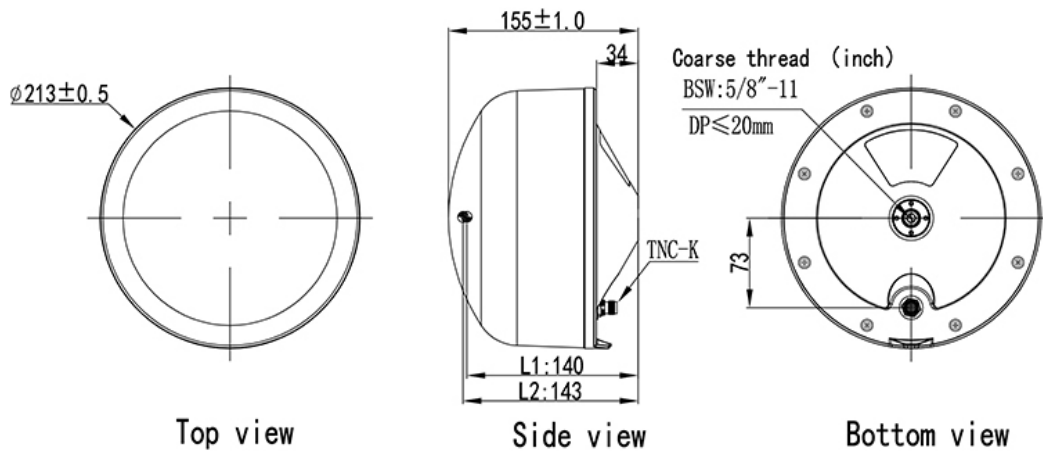
Low Noise Amplifier Characteristics

LNA Gain	L1:40±2dB ;L2:40±2dB	Passband ripple	±1dB
Noise figure	≤1.5dB	Operating voltage	DC3.3~12V
VSWR	≤2.0	Operating current	≤50mA

Structural and environmental adaptability

Antenna size	Φ213*155mm	Operating TEMP	-40℃~+85℃
Weight	≤3kg	Storage TEMP	-55℃~+85℃
Connector	TNC-K	Storage humidity	95% non-condensing
Installation	5/8"×11 (imperial)		

Structural drawing (dimensional tolerances ± 0.3 mm not noted)



Documentation

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

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