

Aviation Antenna

EV108

Description

EV108 is a four-system multi-frequency aerial antenna supporting GPS/BDS/GLONASS and GALILEO, which can be widely used in surveying and mapping, high-precision UAV, vehicle-mounted, etc. It is especially suitable for many applications of UAV, such as agriculture, aerial photography, telemetry, disaster surveillance, patrolling, security monitoring, Power patrol, etc.

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, greatly improving the stability of the system;
3. Small size, light weight, reliable structure, assembled waterproof level up to IP67, single antenna test meets IP65, significantly improve the reliability of the UAV, such as waterproof, impact, etc;
4. Strong anti-interference performance, antenna out-of-band rejection is high, can effectively avoid base station and other signal interference caused by system instability.

Application

- Aerospace
- Telemetry
- Tracking and monitoring

Technical parameters

Passive antenna characteristics

| | | | |
|-------------------|--|--------------------|---------|
| Frequency Range | BDS: B1/B2/B3 GPS:L1 /L2/L5 GLONASS: G1/G2/G3 GALILEO : E1/E6/E5b L-Band | Polarization | RHCP |
| | | Antenna axis ratio | ≤3dB |
| | | Azimuth coverage | 0°~360° |
| | | VSWR | ≤1.5 |
| | | Maximum gain | 2.5dBi |
| Antenna Impedance | 50Ω | Phase center error | ±3mm |

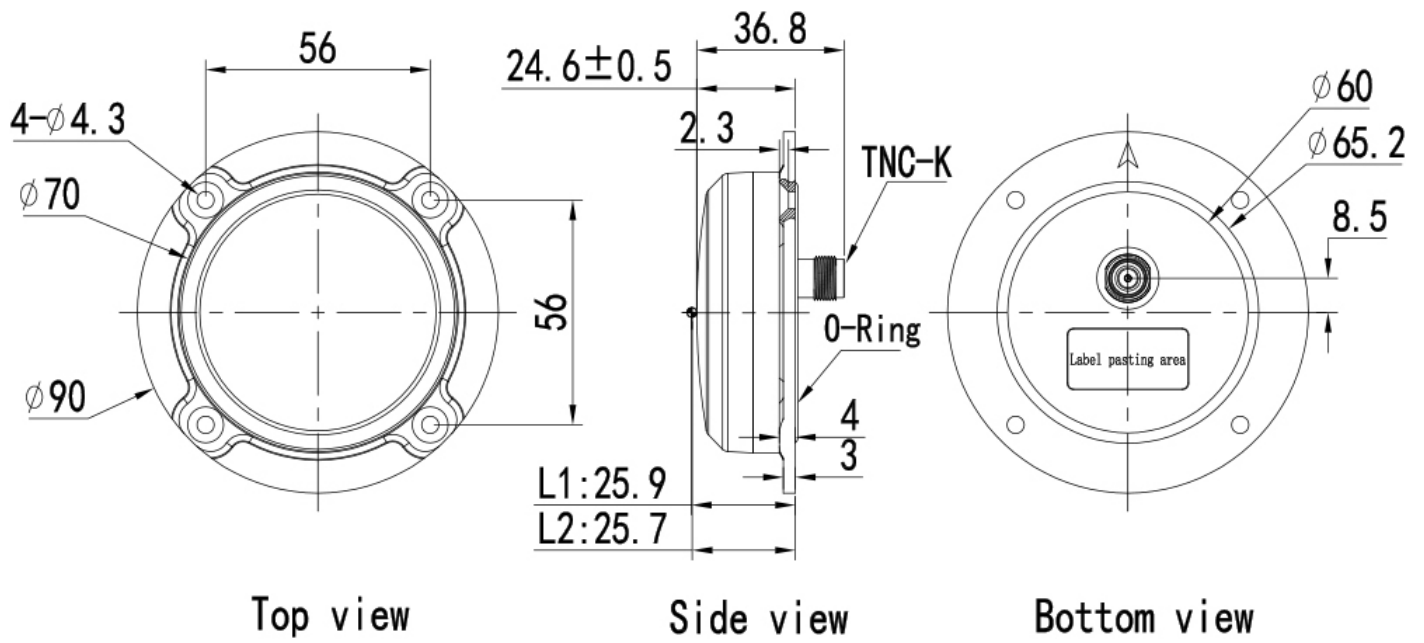
Low Noise Amplifier Characteristics

| | | | |
|--------------|--------|-------------------|-----------|
| LNA Gain | 36±2dB | Passband ripple | ±2dB |
| Noise figure | ≤2dB | Operating voltage | DC3.3~12V |
| VSWR | ≤2.0 | Operating current | ≤50mA |

Structural and environmental adaptability

| | | | |
|--------------|------------------------------------|-------------------|--------------------|
| Antenna size | Φ90*24.6mm(connector not included) | Waterproof rating | IP67 |
| Weight | ≤60g | Operating TEMP | -40℃~+85℃ |
| Connector | TNC | Storage TEMP | -55℃~+85℃ |
| Installation | ? | 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 |
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