



UA91

Choke Ring Antenna

- Multi-constellation and Multi-frequency
- Superior Antenna Phase Center
- Excellent Polar Axis Ratio Performance
- Multipath Suppression

UA91 adopts high-gain broadband antenna to receive GNSS signals such as GPS, BDS, GLONASS, Galileo, QZSS and L-Band. The scheme of multi-stage 3D choke coils with completely symmetrical distribution is adopted to achieve higher phase center stability and excellent anti-multipath interference performance. It has excellent performance that the phase center coincides with the mechanical center.

Product Specification

| Antenna Performance | | In-band Flatness | ± 1.5dB |
|--|------------------------------------|----------------------------------|--------------------------|
| Frequency | GPS: L1/L2/L5 | Out-of-band Suppression | L1 ± 200 MHz >40dBc |
| | BDS: B1/B2/B3 | | L2 ± 200 MHz >50dBc |
| Frequency | GLONASS: G1/G2/G3 | Differential Transmission Delay | ≤ 5ns (L1-L2) |
| | GALILEO: E1/E2/E5/E6C | Antenna Transmission Delay | 15ns typically |
| | QZSS: L1/L2/L5 | Voltage | 3.3 - 12 VDC |
| | SBAS | Current | 35mA typical |
| | L-Band | | |
| Polarization | Right-handed circular | Environmental performance | |
| Axis ratio | ≤ 2dB @Axial | Operating Temperature | -55°C ~ +85°C |
| Antenna Gain | ≥ 5dBi @Axial | Storage Temperature | -55°C ~ +100°C |
| | ≥ -3dBi @Elevation angle 20° | Humidity | Up to 100% |
| Out-of-roundness | ≤ 1dB @ Elevation angle 20° | Water/Dust Proof | IP67 |
| Front-to-back Ratio | ≥ 30dB | Physical | |
| Rolloff-factor | ≥ 13dB | Dimension | Φ370 mm x H263 mm |
| Phase Center Offset | ± 1.5mm | Weight | 7.7 Kg |
| Low Noise Amplifier Performance | | Antenna Interface | TNC-F |
| Frequency Range | 1525 ~ 1615 MHz 1182 ~ 1278 MHz | Radome Material | FRP |
| Characteristic Impedance | 50 Ω | Base Material | Aluminum-magnesium alloy |
| VSWR | ≤ 1.3:1 | Mount | 5/8-11UNC-2B |
| Noise Figure | 1.6dB Typically @25° | | |
| LNA Gain | 40 ± 2dB | | |

