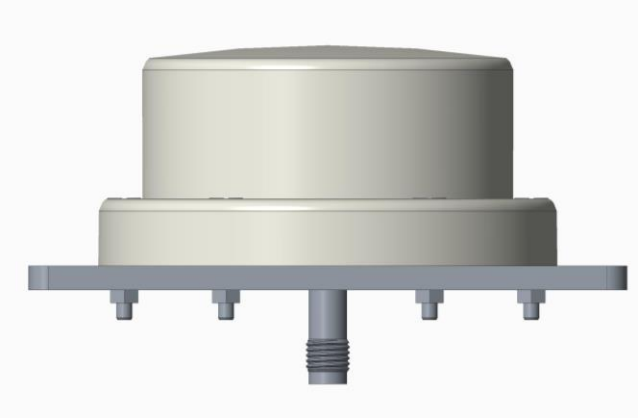
# Thiagarajar Telekom Solutions (P) Limited

## DUALBAND ANTENNA – TTSLGGNL - 23



The TTSLGGNL- 23 is a High-Performance Rugged DUAL band GNSS Antenna designed to operate at GPS L1, GLONASS L1 and IRNSS L5 bands making it suitable for Multi Constellation GNSS signal reception. The Antenna has a good gain in each of the bands with a low noise figure GNSS based Navigational Applications

The TTSLGGNL- 23 antenna operates at the IRNSS L5, GPS L1 and GLONASS L1 band frequencies with high Performance making it suitable for combined IRNSS, GPS and GLONASS signal reception. The antenna has a wide beam width with good axial ratio.

### Key Features

- Compact in Size
- Wide Beam width
- Good Axial Ratio

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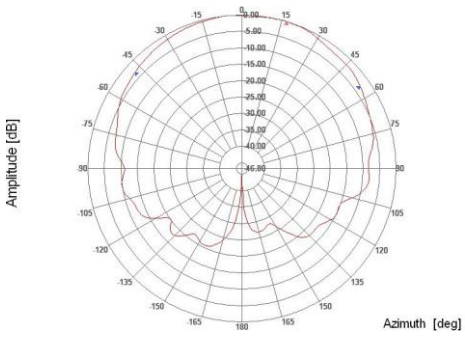
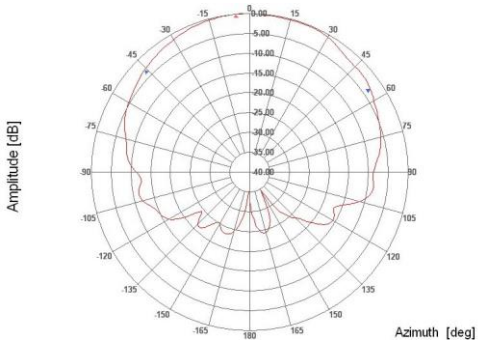



Radiation pattern at GPS-L1 band.




Radiation pattern at IRNSS-L5 band

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## Technical Specifications

| Electrical Specifications | |
|---|---|
| IRNSS L5 | 1174 to 1178 MHz |
| GPS L1 /GLONASS L1 | 1570 to 1607 MHz |
| Galileo E1 | 1575 MHz (24 MHz) |
| BeiDou B1 | 1561 MHz (4 MHz) |
| VSWR | ≤ 2.0 :1 |
| Passive Gain | >3dBiC at Bore sight or better |
| 3dB Beam width | >90° |
| LNA Gain | 30 ±2 dB |
| LNA Power Consumption | 5V - < 100mA |
| Out of Band Rejection | 60dB |
| Noise Figure | ≤ 2.0 dB |
| Output Impedance | 50 Ohms |
| Axial Ratio | < 3 dB |
| Lightening Protection | DC Grounding |
| Power Handling | 1 Watt |
| Connector | SMA - (F) |

| Mechanical Specifications | |
|---|---|
| Dimension Excluding Connector (OD x H) | 90 mm x 25 mm |
| Mounting Plate Dimension (L x W x H) | 130 x 130 x 4 |
| Weight | < 500 grams. |

| Environmental Specifications | |
|---|---|
| Mounting | Standard Screw Mounting |
| Operating Temperature | -40°C to +125°C |
| Storage Temperature | -40°C to +125°C |
| Humidity | 95% RH at 45°C |

| Environmental Stress Screening | |
|---|---|
| Mechanical Vibration | MIL-STD-810G / JSS 55555 |
| Functional Shock | MIL-STD-810G / JSS 55555 |
| Crash hazard | MIL-STD-810G / JSS 55555 |
| Temperature and Altitude | MIL-STD-810G / JSS 55555 |
| Humidity | MIL-STD-810G / JSS 55555 |
| Temperature Shock | MIL-STD-810G / JSS 55555 |
| Salt Fog | MIL-STD-810G / JSS 55555 |
| Fungus | MIL-STD-810G / JSS 55555 |
| Sand and Dust | MIL-STD-810G / JSS 55555 |
| EMI & EMC | MIL-STD-461F |

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