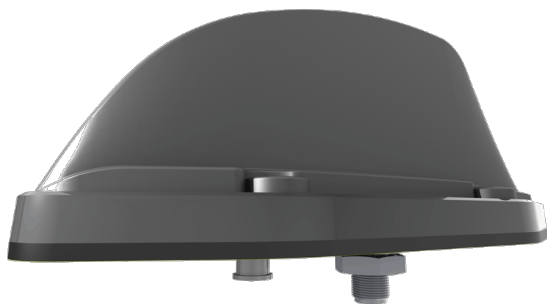


UHF Transit Antenna

TRNC[G]-[UHF]

PANORAMA ANTENNAS



TRNC[G]-[UHF]

- Standard Four Hole Rail Fixing
- Wideband UHF Element
- Optional Integrated GPS/GNSS Antenna [TRNCG Version]

The TRNC[G] antenna series has been designed specifically for use on trains, trams and buses underground or over ground.

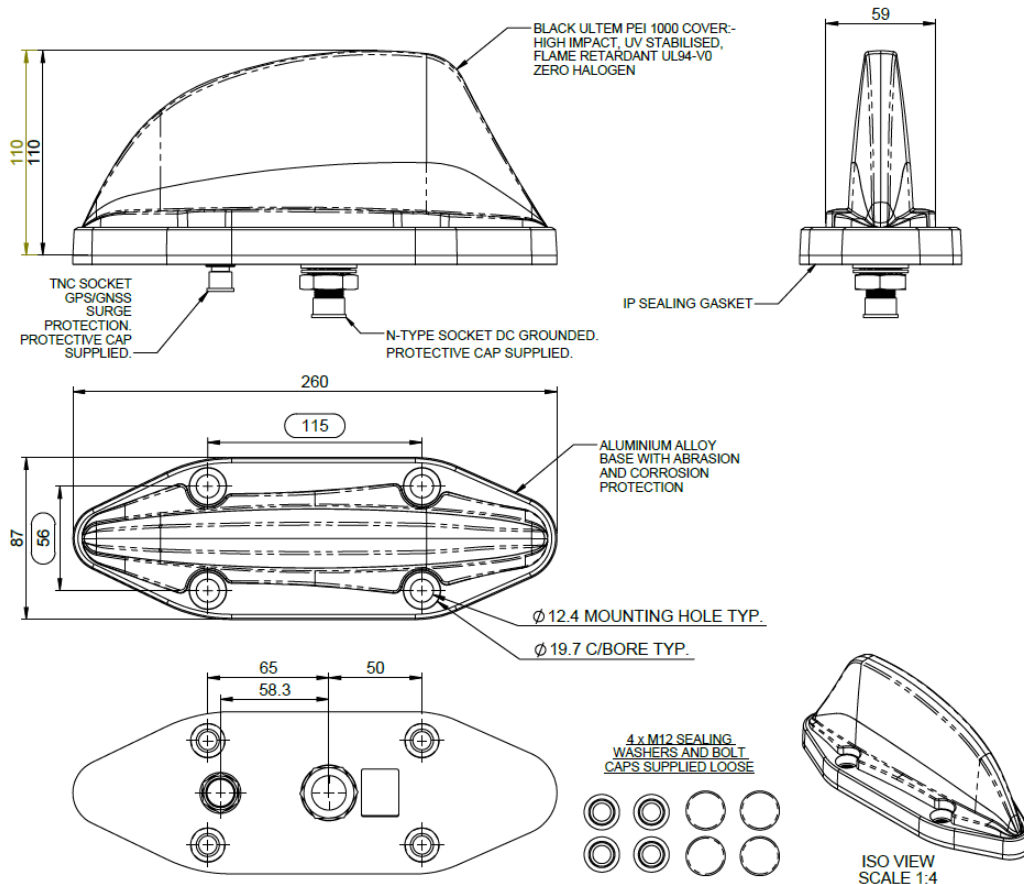
The TRNC[G]-[UHF] range offers versions tuned to various UHF bands including TET (380-430MHz), S2 (410-430MHz) and S4 (450-470MHz). Versions are available with an optional GPS/GNSS antenna with a 26dB LNA and advanced filtering. The radiating element is DC grounded and, in versions with a GPS module it is protected by a gas discharge surge arrester.

Housed in a high impact, flame retardant Ultem housing, the TRNC[G] series is weatherproof ensuring that the antenna's performance is never compromised.

The TRNC[G] meets stringent industry standards including EN50155, EN45545-2 (HL1-3) and is ingress protected to IP69K when properly installed.

Technical Drawing

Part No. TRNCG-TET shown



UHF Transit Antenna

TRNC[G]-[UHF]

Product Data

| Part No. | | TRNCG-TET | TRNCG-S2 | TRNCG-S4 | TRNC-TET | TRNC-S2 | TRNC-S4 |
|--------------------------------|--------------------|--|----------|----------|----------|---------|---------|
| Electrical Data | | | | | | | |
| Frequency Range (MHz) | | 380-430 | 410-430 | 450-470 | 380-430 | 410-430 | 450-470 |
| Peak Gain ** | | 5dBi | | | | | |
| Polarisation | | Vertical | | | | | |
| Typical VSWR* | | <2.5:1 | | | | | |
| Pattern | | Omni-directional | | | | | |
| Impedance | | 50Ω | | | | | |
| Max input power (W) | | 60 | | | | | |
| GPS Data | | | | | | | |
| Frequency Range (MHz) | | 1559-1612 | | | | - | |
| Impedance | | 50Ω | | | | - | |
| LNA Peak Gain | | 26dB ± 3 | | | | - | |
| Polarisation | | Right Hand Circular | | | | - | |
| Operating Voltage | | 3-5V DC | | | | - | |
| Current (Typical) | | 17mA | | | | - | |
| Mechanical Data | | | | | | | |
| Dimensions (mm) | Height (N/inc pad) | 110 (4.33") | | | | | |
| | Width | 87 (3.42") | | | | | |
| | Length | 260 (10.23") | | | | | |
| Environmental Specifiction | | | | | | | |
| Operating Temp (°C) | | -40° / +85°C (-40° / +185°F) | | | | | |
| Radome Material | | Ultem 1000 | | | | | |
| Radome Flame Retardance Rating | | V0 (UL 94) | | | | | |
| Base Material | | Cast Aluminium | | | | | |
| Ingress Protection | | IP67 or IP69K depending on installation condition | | | | | |
| Approvals Data | | | | | | | |
| Regulatory Approvals | | EN50155:2021 (Dry heat & Cooling, Damp Heat, Salt Mist), EN61373:2010 / EN50155:2021 (Shock & Vibration), EN45545:2020- HL3 (flammability) | | | | | |
| Mounting Data | | | | | | | |
| Fixing | | 4x Mounting holes to suit M12 bolts | | | | | |
| Cable Data | | | | | | | |
| Termination | Comms | N (female) - DC grounded | | | | | |
| | GPS | TNC (female) - surge protected | | | | - | |

** Measured on a 1x1m (3'x3') ground plane excluding cable loss.

* Measured on a 600 x 600mm (2' x 2') ground plane with 1m (3') of low loss cable.

UHF Transit Antenna

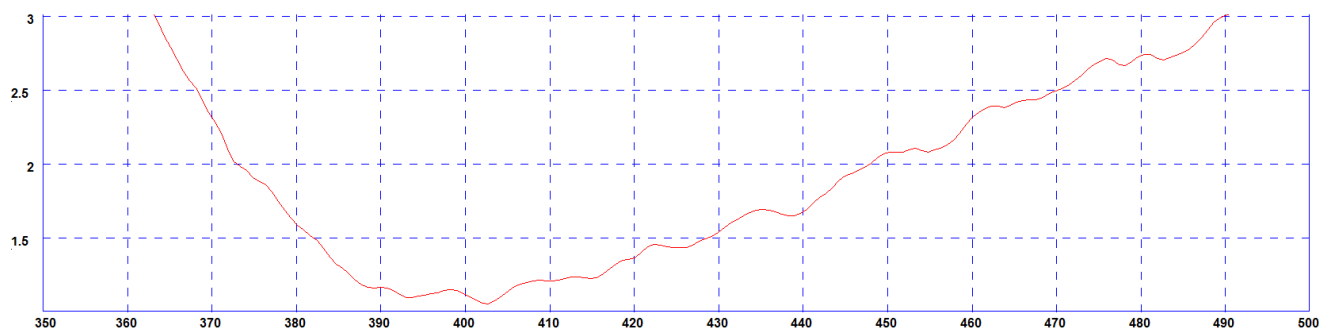
TRNC[G]-[UHF]

PANORAMA ANTENNAS

Electrical Data

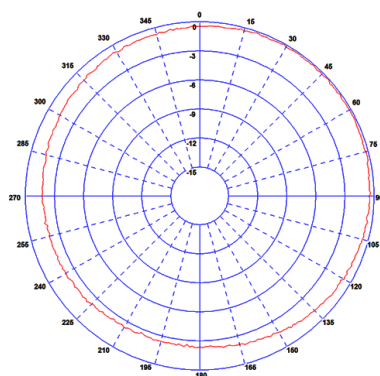
*TRNC-TET data shown

Typical VSWR*

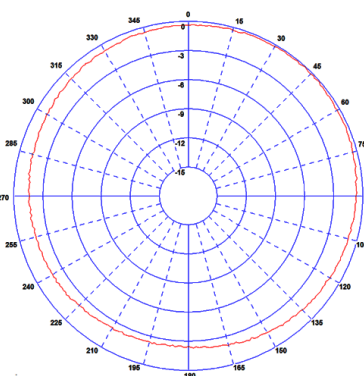


* Measured on a 600x600mm (2'x2') ground plane with 1m (3') of low loss cable

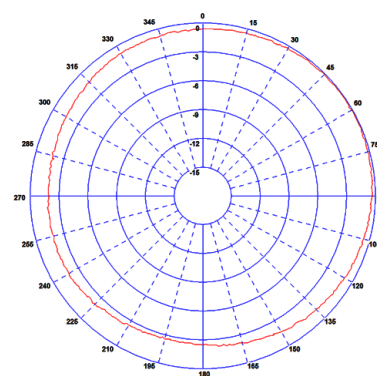
Typical H Plane - 380MHz



Typical H Plane - 400MHz



Typical H Plane - 430MHz



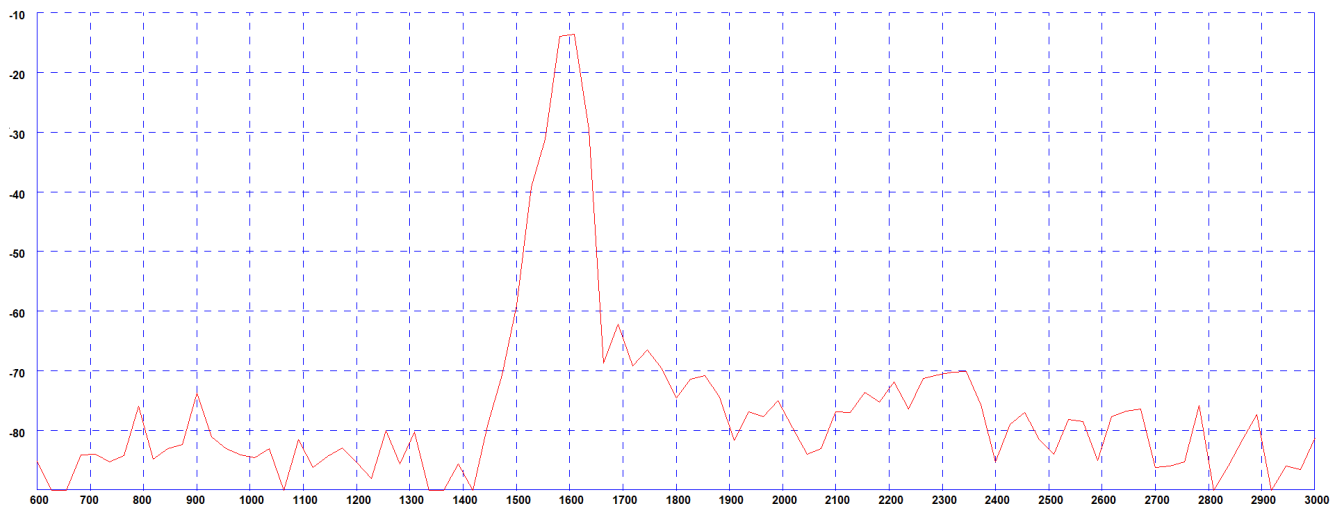
UHF Transit Antenna

TRNC[G]-[UHF]

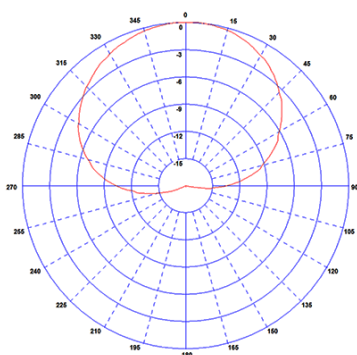
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GPS/GNSS Data

Swept Peak Gain GPS/GNSS



Typical E Plane Pattern - GPS/GNSS
1575 MHz



Typical E Plane Pattern - GPS/GNSS
1602 MHz

