TETRA UHF
UHF Transit Antenna

TRNC[G]-TET

TRNC[G]-TET

- 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.

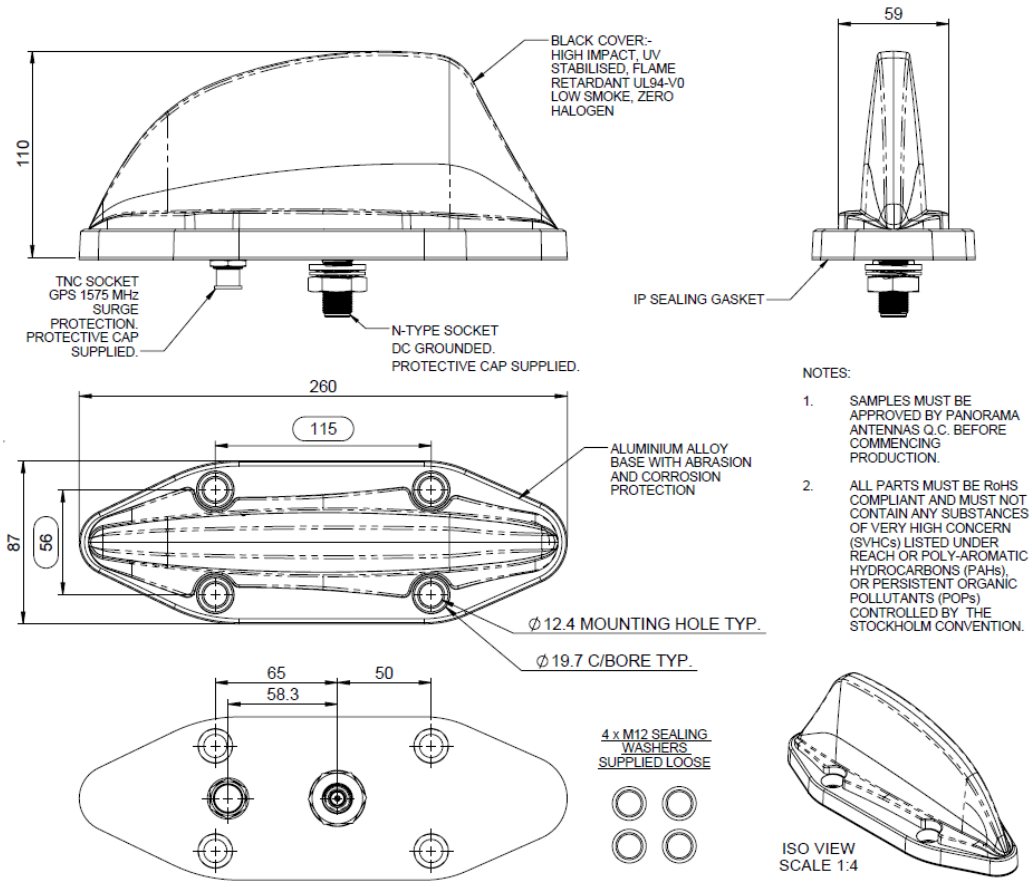
The TRNC(G)-TET range covers 380-430MHz UHF with optional GPS/GNSS with a 26dB LNA. The radiating element is DC grounded and, in versions with a GPS module it is protected by a gas discharge surge arrestor.

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

Technical Drawing

TRNCG-TET Shown



NOTES:

1. SAMPLES MUST BE APPROVED BY PANORAMA ANTENNAS Q.C. BEFORE COMMENCING PRODUCTION.
2. ALL PARTS MUST BE RoHS COMPLIANT AND MUST NOT CONTAIN ANY SUBSTANCES OF VERY HIGH CONCERN (SVHCs) LISTED UNDER REACH OR POLY-AROMATIC HYDROCARBONS (PAHs), OR PERSISTENT ORGANIC POLLUTANTS (POPs) CONTROLLED BY THE STOCKHOLM CONVENTION.

Panorama Antennas Ltd
Frogmore, London, SW18 1HF, United Kingdom
T: +44 (0)20 8877 4444 | F: +44 (0)20 8877 4477
E: sales@panorama-antennas.com
W: www.panorama-antennas.com

12/09/2018 V2

TETRA UHF
UHF Transit Antenna

TRNC[G]-TET

PANORAMA ANTENNAS

Product Data

Part No.		TRNCG-TET	TRNC-TET
Electrical Data			
Frequency Range (MHz)		380-430 MHz	
Peak Gain: **	380-430MHz	5dBi	
Polarisation		Vertical	
Typical VSWR*		< 2:1	
Pattern		Omni-directional	
Impedance		50Ω	
Max Input Power (W)		60	
GPS Data			
Frequency Range (MHz)		1560-1612	-
Impedance		50Ω	-
LNA Gain		26dB ± 3	-
Polarisation		Rigth Hand Circular	-
Operating Voltage		3-5V DC	-
Current (Typical)		15mA	-
GPS Antenna EMC Compliance		EN 301 489-1 V1.81 & EN 301 489-3 V1.6.1 | EN 50121-3-2:2015	-
Mechanical Data			
Dimensions (mm)	Height (N/inc pad)	110 (4.33")	
	Width	87 (3.42")	
	Length	260 (10.23")	
Environmental Specification			
Operating Temp (°C)		-40° / +80°C (-40° / +176°F)	
Radome Material		Ultem 1000	
Radome Flame Retardance Rating		V0 (UL 94)	
Base Material		Cast Aluminium	
Ingress Protection		IP67 (Report No. 98883) or IP69K when installed in accordance with SW3 - 988 (Report No. 103439)	
Approvals Data			
Regulatory Approvals		EN50155:2007 (Dry heat & Cooling), EN61373:2010 / EN50155:2007 (Shock & Vibration), EN45545 - HL3 (flammability)	
Mounting Data			
Fixing		4 × mounting holes to suit M12 bolts	
Termination Data			
Termination	Comms	N (female) - DC grounded	
	GPS	TNC (female) - surge protected	-

** Simulated on a 600 x 600mm (2' x 2') ground plane without cable.
* Measured on a 600 x 600mm (2' x 2') ground plane with 1m (3') of low loss cable.

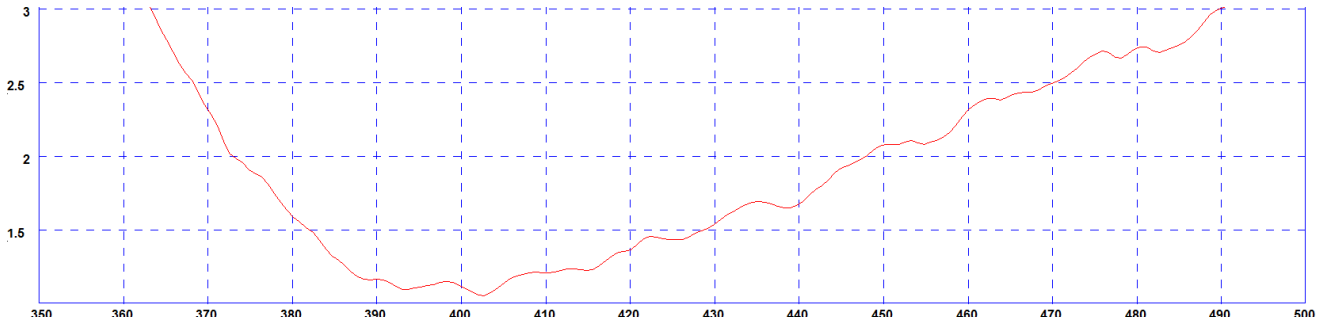
Panorama Antennas Ltd
Frogmore, London, SW18 1HF, United Kingdom
T: +44 (0)20 8877 4444 | F: +44 (0)20 8877 4477
E: sales@panorama-antennas.com
W: www.panorama-antennas.com

TETRA UHF
UHF Transit Antenna

TRNC[G]-TET

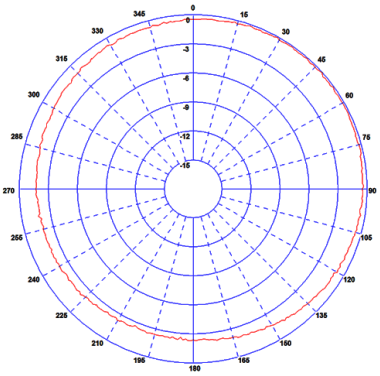
Electrical Data

Typical VSWR*

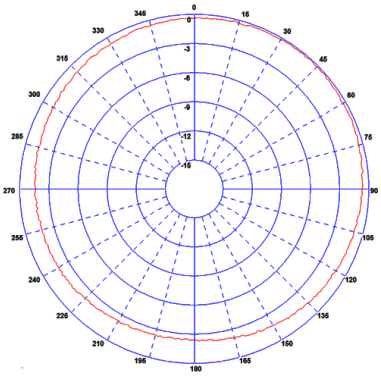


* Measured on a 600 x 600mm (2' x 2') ground plane with 1m (3')of low loss cable

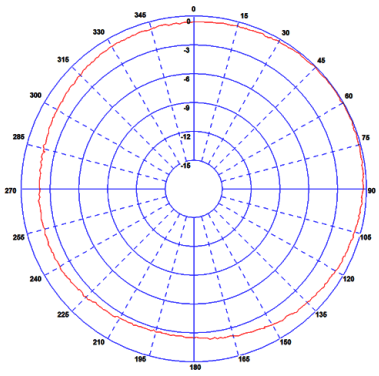
Typical H Plane - 380MHz



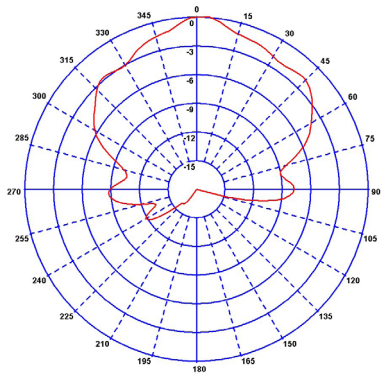
Typical H Plane - 400MHz



Typical H Plane - 430MHz



Typical E-Plane Pattern - (GPS) 1575MHz



Patterns measured on a 600 x 600 (2' x 2') ground plane without cable

Panorama Antennas Ltd
Frogmore, London, SW18 1HF, United Kingdom
T: +44 (0)20 8877 4444 | F: +44 (0)20 8877 4477
E: sales@panorama-antennas.com
W: www.panorama-antennas.com

12/09/2018 V2