

### TRNC[G]-TET

Standard four hole rail fixing

Wideband UHF element

Optional Integrated GPS / GNSS / antenna [TRNCG version]

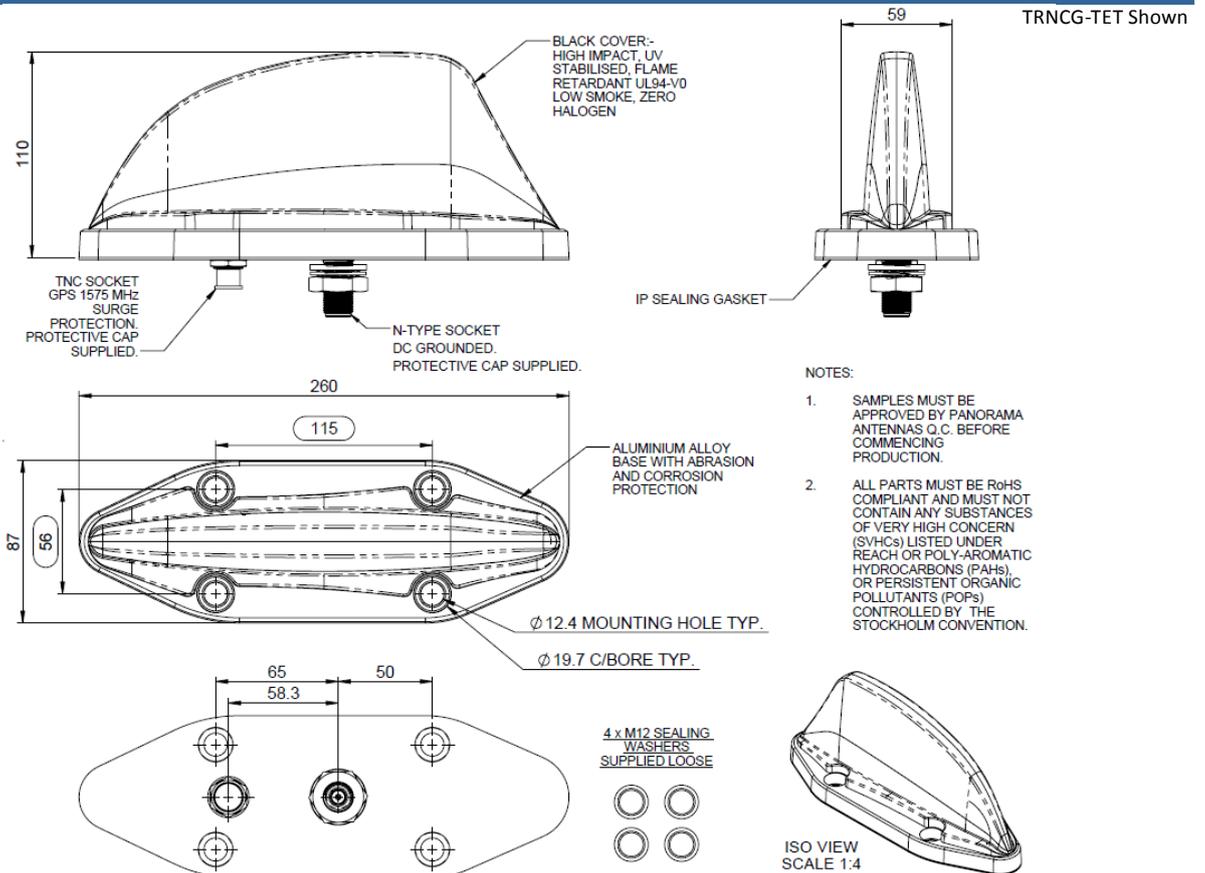


The TRNC(G) antenna series has been designed specifically for use on trains, trams and buses underground or over ground.

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 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.

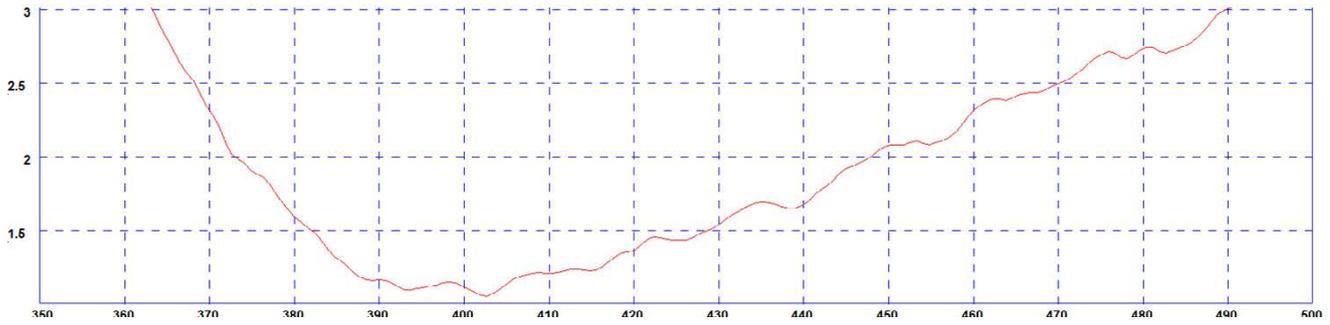
#### Technical Drawing



# TETRA UHF

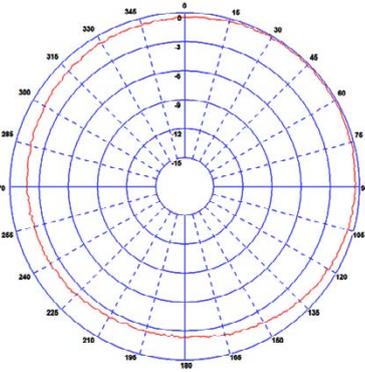
## UHF Transit Antenna

Typical VSWR\*

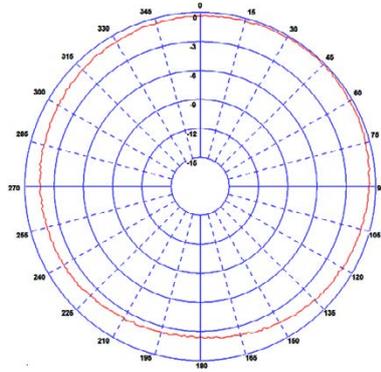


\* Measured on a 600 x 600mm (2' x 2') ground plane with 1m (3') of low loss cable

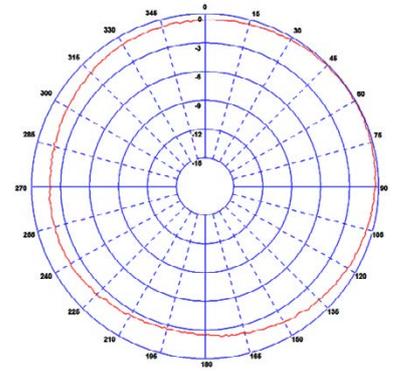
Typical H Plane - 380MHz



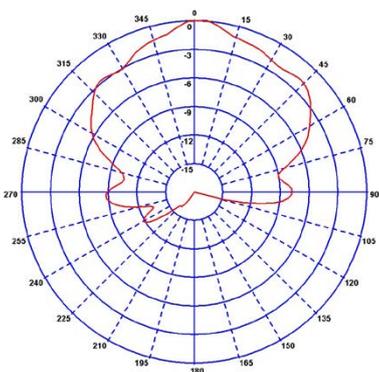
Typical H Plane - 400MHz



Typical H Plane - 430MHz



Typical E-Plane Pattern - (GPS) 1575MHz



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

# TETRA UHF

## UHF Transit Antenna

Part No.		TRNCG-TET	TRNC-TET
<b>Electrical Data</b>			
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	
<b>GPS Data</b>			
Frequency Range (MHz)	1560-1612	-	
Impedance	50Ω	-	
LNA Gain	26dB ± 3	-	
Polarisation	Righth 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		-
<b>Mechanical Data</b>			
Dimensions (mm)	Height (N/inc pad)	110 (4.33")	
	Width	87 (3.42")	
	Length	260 (10.23")	
<b>Environmental Specification</b>			
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. 48883)		
<b>Approvals Data</b>			
Regulatory Approvals	EN50155:2007 (Dry heat & Cooling), EN61373:2010 / EN50155:2007 (Shock & Vibration), EN45545 - HL3 (flammability)		
<b>Mounting Data</b>			
Fixing	4 × mounting holes to suit M12 bolts		
<b>Termination Data</b>			
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.

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Waiver: The data given above is indicative of the performance of the product/s under particular conditions and does not imply a guarantee of performance. These specifications are subject to change without notice.

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