



### 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.

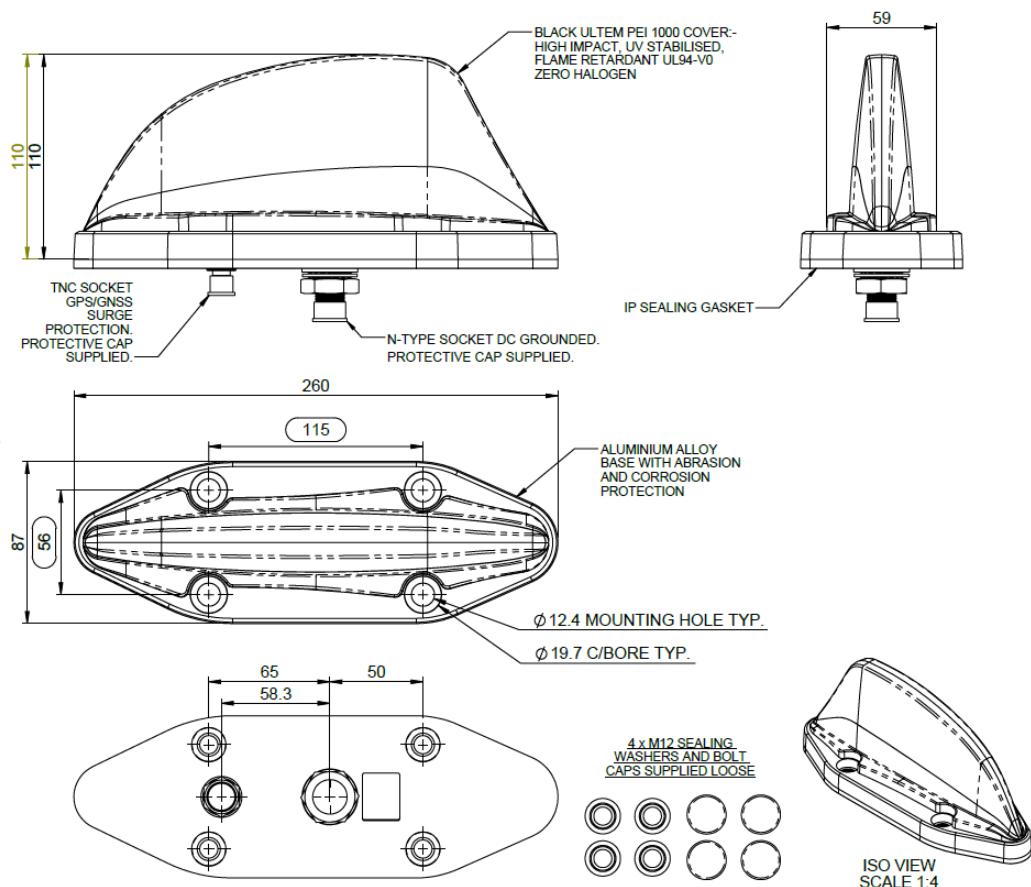
The TRNC[G]-[UHF] range offers versions tuned to various UHF bands including TET (380-430MHz), S2 (410-430MHz) and S4 (450-470MHz). Versions are available with an optional GPS/GNSS antenna with a 26dB LNA and advanced filtering. The radiating element is DC grounded and, in versions with a GPS module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

PANORAMA  ANTENNAS

Product Data

Part No.	TRNCG-TET	TRNCG-S2	TRNCG-S4	TRNC-TET	TRNC-S2	TRNC-S4
<b>Electrical Data</b>						
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			
<b>GPS Data</b>						
Frequency Range (MHz)		1559-1612			-	
Impedance		50Ω			-	
LNA Peak Gain		26dB ± 3			-	
Polarisation		Right Hand Circular			-	
Operating Voltage		3-5V DC			-	
Current (Typical)		17mA			-	
<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° / +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				
<b>Approvals Data</b>						
Regulatory Approvals	EN50155:2021 (Dry heat & Cooling, Damp Heat, Salt Mist), EN61373:2010 / EN50155:2021 (Shock & Vibration), EN45545:2020- HL3 (flammability)					
<b>Mounting Data</b>						
Fixing	4x Mounting holes to suit M12 bolts					
<b>Cable Data</b>						
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.

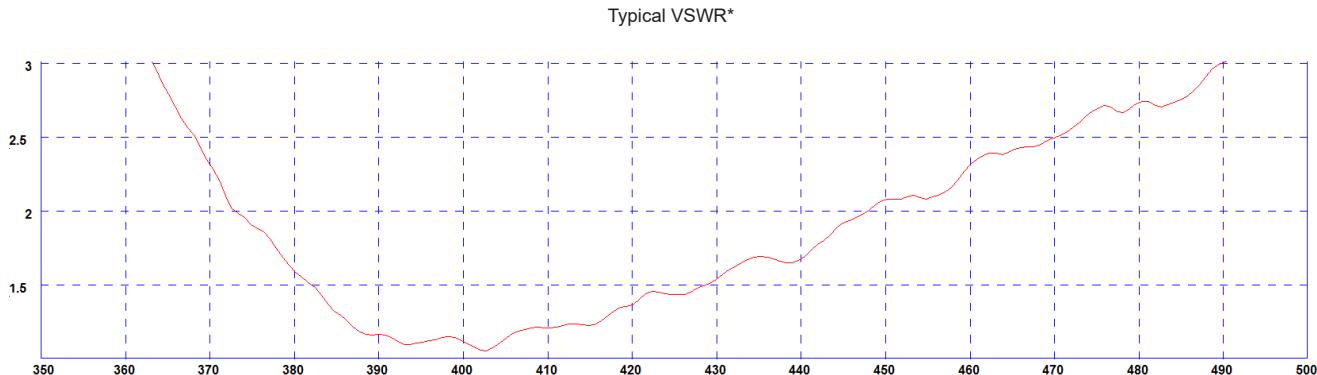
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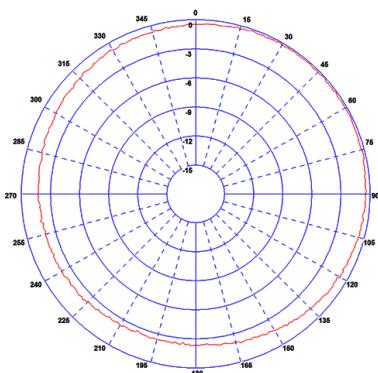
### Electrical Data

\*TRNC-TET data shown

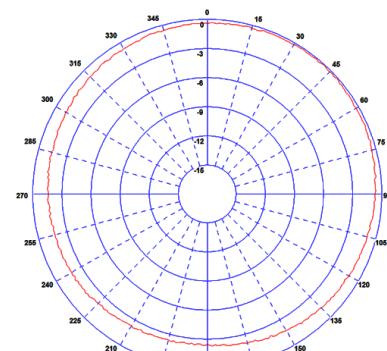


\* Measured on a 600x600mm (2'x2') ground plane with 1m (3') of low loss cable

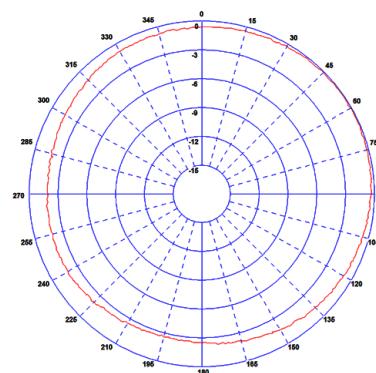
Typical H Plane - 380MHz



Typical H Plane - 400MHz



Typical H Plane - 430MHz



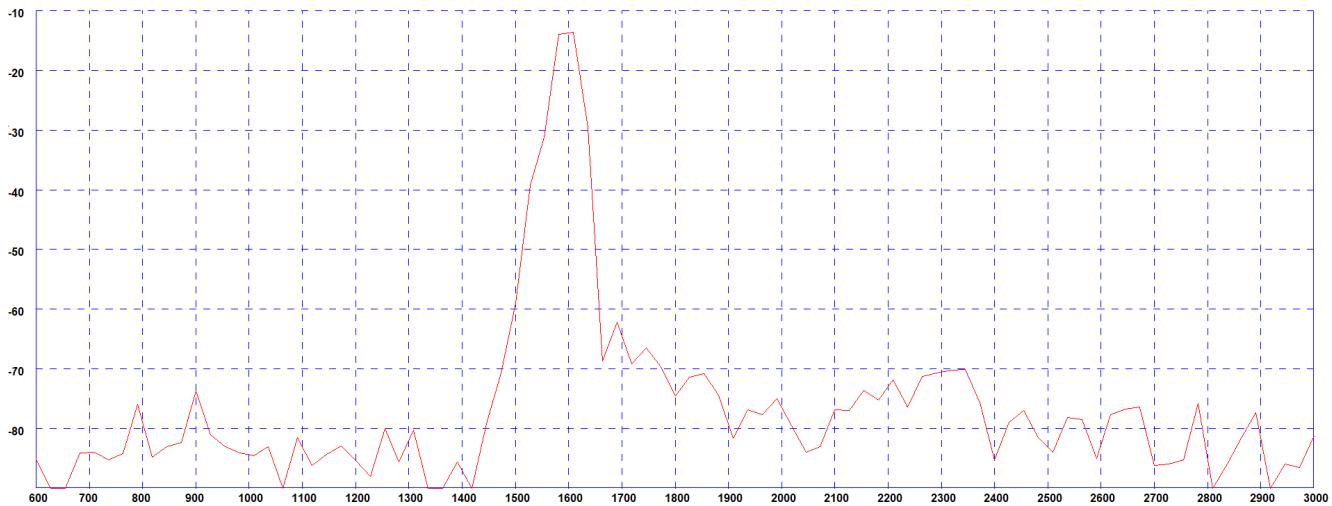
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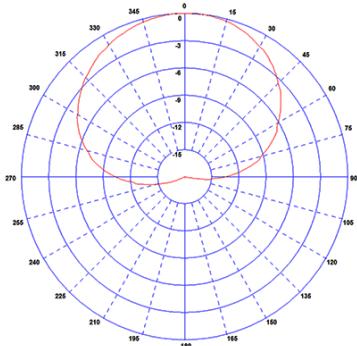
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GPS/GNSS Data

Swept Peak Gain GPS/GNSS



Typical E Plane Pattern - GPS/GNSS  
1575 MHz



Typical E Plane Pattern - GPS/GNSS  
1602 MHz

