



High Performance Quad Band GNSS Antenna

Part No: V3N-GGI-103



The V3Novus V3N-GGI-103 is a high performance reliable and Rugged GNSS antenna designed for high precision positioning service and offers superior satellite signal tracking, like GPS, GLONASS, IRNSS L5 , IRNSS S Band ,GALILEO, BeiDou. Antenna is designed to meet Industrial, Marine and Military Applications .

QUAD BAND CONSISTENT PERFORMANCE ACROSS ALL BANDS

The V3N-GGI-103 antenna is designed to give a Consistent performance on GPS, GLONASS, IRNSS L5, S-Band, Galileo, Beidou, QZSS as well as L-Band Correction Services. In addition to that it has a very stable Phase Center variation with advanced multipoint feeding technology, exceptional low elevation satellite tracking with symmetric radiation Patterns, high gain with ultra low signal loss

RUGGED, LIGHT WEIGHT, LOW POWER CONSUMPTION

V3N-GGI-103 antenna is with Compact design with ruggedized IP67, IP69K rating Enclosure with Aluminium alloy base and Polymer Polycarbonate Radome to meet tough Marine Environments. Antenna comes with TNC/N Female Connector for reliable connection for cable extension.

SUPPORTS
IRNSS
L5 & S*



KEY FEATURES

- ❖ QUAD Band GNSS Support: GPS, GLONASS, Galileo, BeiDou, IRNSS L5, S Band as well as L-Band correction service.
- ❖ Improved signal filtering and excellent multi-path rejection
- ❖ Low power consumption, lightweight, small form factor facilitates easier integration
- ❖ Rugged Enclosure with Ip67, IP69K Compliant



PERFORMANCE

Signal Received	
GPS	L1/L2/L5
GLONASS	L1/L2/L3
GALILEO	E1/E5a/E5b/E6
BDS	B1/B2/B3/S
QZSS	L1/L2/L3/L6
IRNSS	L5/S
L-Band	
Nominal Impedance	50Ω
Polarization	RHCP
Axial Ratio	≤3dB
Azimuth Coverage	360°(omni-directional)
Output VSWR	≤2.0
Peak Gain	5.5dBi

LOW NOISE AMPLIFIER

LNA Gain	40±2dB
Noise Figure	≤2dB
Output VSWR	≤2.0
Passband Ripple	±2dB
Operation Voltage	+3.3 ~ +18VDC
Operation Current	≤45mA
Differential Propagation Delay	≤5ns

ENVIRONMENTAL

Temperature	
Operating	-45°C ~ +85°C
Storage	-55°C ~ +85°C
Humidity	95% no-condensing
Water/Dust Resistance	IP67, IP69K
MTBF	1,00,000hr

MECHANICAL

Dimensions	φ150×53mm
Connector	N/TNC Female
Weight	≤650g
Vibration	9.8gRMS, 24-2000Hz
Shock	75Gs, 6ms duration, 3 shocks in mutually perpendicular axes
Salt Fog	96h (continuous spray, 5% concentration, 35°C)
Mounting Pole Mount	Coarse threaded 5/8"-11, thread hole depth 10-11mm
Screws Mount	4xM8 screws depth

ENVIRONMENTAL REQUIREMENTS

The V3N-GGI-103 has been designed to meet the JSS 55555 and MIL-STD-461F following Standard.

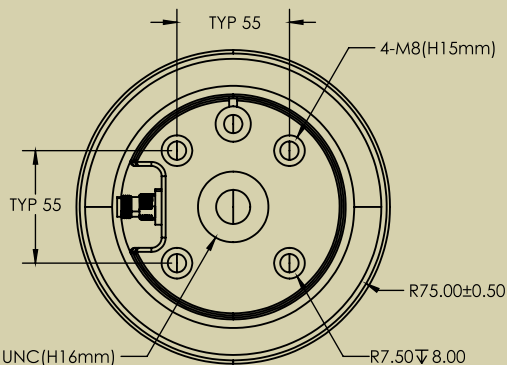
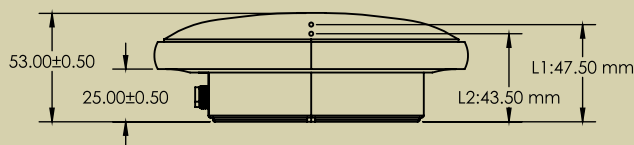
Environment	Applicable Standard
Mechanical Vibration	JSS 55555
Functional Shock	JSS 55555
Crash Hazard	JSS 55555
Temperature and Altitude	JSS 55555
Temperature Shock	JSS 55555
Humidity	JSS 55555
Salt Fog	JSS 55555
Fungus	JSS 55555
Sand and Dust	JSS 55555
EMI & EMC	MIL-STD-461F



ORDER FOR BELOW PART NO

V3N-GGI-103-01	TNC Straight Female
V3N-GGI-103-14	N-Type Straight Female

Structure & Phase Center Drawing (mm)



N/TNC TYPE CONNECTOR

