

ALLISCOM

Iridium + GPS Antenna

Data Sheet



Model No. GCRGI

Feature Iridium Certified
Delivers high performance for Iridium and GPS
Resistant to harsh outdoor environment
Concealable, Flat structure
IP67

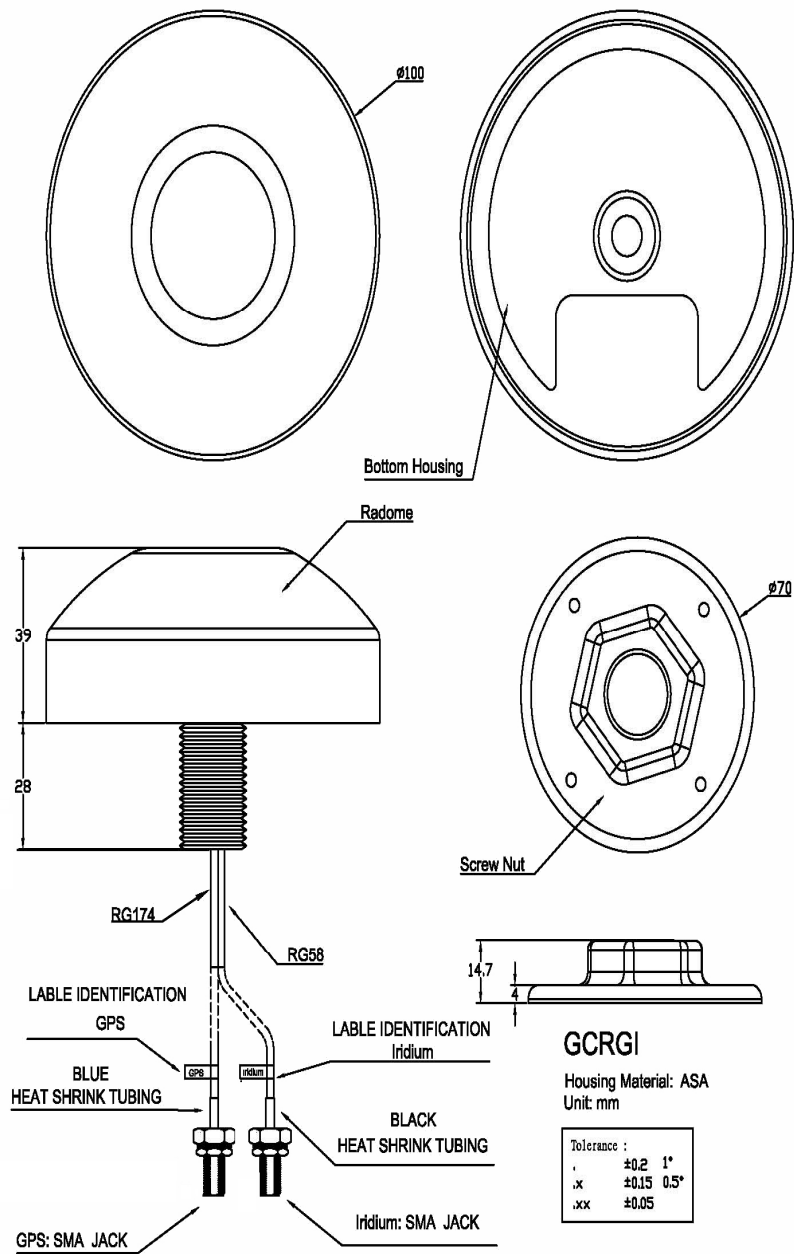
Description The GCRGI is a high performance and quality antenna for Iridium satellite phone communications and GPS position. A low profile passive/Active antenna guarantees continuous signal coverage for excellent operation. The type of antenna allows easy installation. There is a high demanding of the GPS-Iridium antennas for Crew on the steamer, Navy along coastline, Caravan in desert who requires reliable, high-performing antennas connected with Iridium Phone Set for a seamless communications.

1. Electrical Specifications

Electrical Data

Iridium antenna:	
Center Frequency	1621 ± 3 MHz
Bandwidth	20 MHz Min. at -10 dB
Axial Ratio	3 dB Max. @ 0°
Efficiency	70% Min. (Without ground plane)
Impedance	50 Ω
Peak Gain	5 dBic Min @ 0°
Gain Coverage	≥ -4dBic at -90° ≤ θ ≤ 90° (over 75% volume)
Power Handling	30 Watt
Polarization	RHCP
GPS antenna:	
Center Frequency	1575.42 ± 3 MHz
VSWR	1.5 Max.
Bandwidth	10 MHz Min. at -10 dB
Axial Ratio	3 dB Max. @ 0°
Impedance	50 Ω
Peak Gain	4 dBic Min.
Gain Coverage	≥ -4dBic at -90° ≤ θ ≤ 90° (over 75% volume)
Power Handling	1 watt
Polarization	RHCP
Amplifier Gain	28 dB Typical
Filtering	At ±40MHz 35dB At ±75MHz 40dB At ±100MHz 45dB
Noise Figure	1.8 dB Typical
Output VSWR	2.0 Max.
DC Voltage	DC 2.7 V to 6.0V
DC Current	12 ± 5.5 mA
Mechanical:	
Weight (Without Cable)	280 grams Max.
Housing Material	ASA
Size	100mm Dia. × 67mm (39mm + 28mm)
Cable	custom
Length	custom
Connector	custom
Mounting	Permanent mount
Housing Color	White

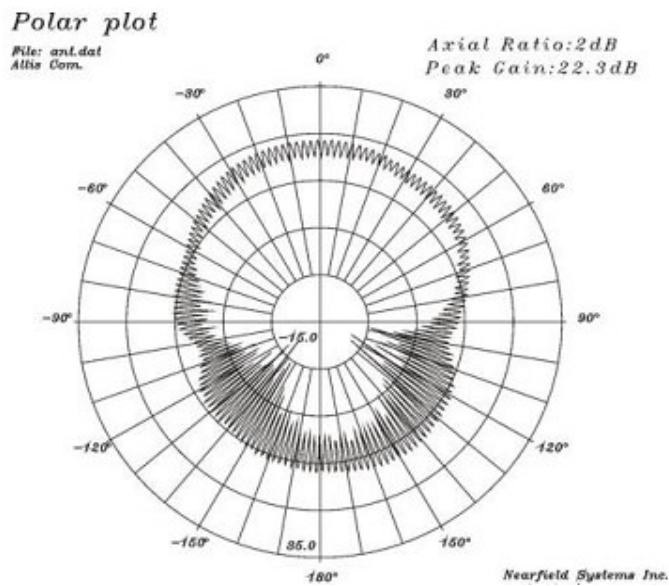
2. Dimension



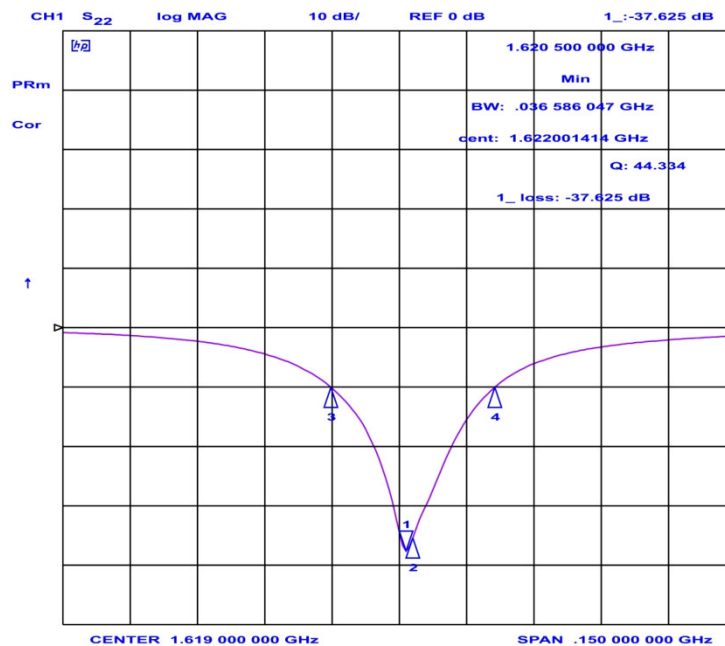
3. Appendix

- GPS Active Antenna:
Antenna Radiation Pattern (X-Z Plane)

Test Voltage : 5V
Cable length: 5m
Cable loss \approx 6dB



- Iridium Return Loss:



- Iridium Efficiency

