

Marine or Car GPS & VHF Antenna

MODEL: GVA-136



Application:

The application shall apply for antenna unit which shall be used for Marine AIS systems & Radio Car AVL and Fleet Management systems. The combination of High Gain GPS antenna and a low profile covert VHF antenna is highly ideal for these applications that require durability, small in size, covert installation and rugged construction.

SPECIFICATIONS:

Physical Condition	
Dimension	71.5mm (L) x 49.5mm (W) x 27mm (H)
Weight	50 grams (excluding cable & connector)
Environmental Conditions	
Operation temperature	-40°C to +85°C
Storage temperature	-40°C to +100°C
Relative Humidity	95% non-condensing
Cable & Connector	
Cable	5 meter RG174/U (standard) cable, other length available
Connector Available	BNC,TNC,FME (to be adapted), GT5, MCX (OSX), SMA, SMB or SMC in straight or right angle
Optional Adapters	Universal Connector Adapter (FME to TNC/BNC/SMA/SMB/MCX)
Antenna Element	
Center Frequency	1575.42 MHz +/-1.023MHz
Polarization	R.H.C.P. (Right Handed Circular Polarization)
Absolute Gain @ Zenith	3 dBic Typ.
Gain	90° : 2.0dBi min. 20° : -5.0dBi min. Mounted on the 60mm x 60mm square ground plane
Axial Ratio	90° : 3 .0dB max. Mounted on the 60mm x 60mm square ground plane
Low Noise Amplifier	
Center Frequency	1575.42 MHz +/- 1.023 MHz
Gain	28+/-4.5dB
Bandwidth	10 MHz min. @S11≤-10 dB
Noise Figure	1.5dB Typ.

Filter	25dB @ fo± 50MHz 35dB @ fo± 100MHz * fo=1575.42MHz
Supply Voltages	2.5 ~5.5V DC
Current Consumption	2.5V : 6.6mA Typ. 3V: 8.6mA Typ. 4V: 12.6mA Typ. 5V: 16.6mA Typ.
Output Impedance	50 ohm
Output VSWR	2.0 max.
Overall Performance (Antenna Element, LNA & Cable)	
Frequency range	1575.42 +/- 1.023 MHz
Gain	At 90° 30 ± 4.5dBi-(cable loss) Note:1 Mounted on the 60mm x 60mm square ground plane
Output Impedance	50 ohm
VSWR	2.0 max.

VHF	
Frequency	136 ~ 174Mhz
Gain	Unit
VSWR	1.5:1
Power rating	200W
Band-width	10Mhz
Type	1/4 wave
Whip length	52cm
Impedence	50Ω
Cable type	RG58/U
Cable length	5M
Connector	Mini UHF or TNC / N
Broach	3/4" hole mount

GPS / VHF

FREQ. "L" 1/4 WAVE

134 MHz	520 mm
136	505
138	490
140	485
142-150	470
152	455
154	440
156	435
158	425
160-168	420
170	407
172	395
174	390

