

# Vehicle Locating & Marine Small

## GPS/GLONASS/GSM Antenna

### MODEL: GAF-62G

Small size and ruggedness, demand of vehicle locating and marine navigation GPS/ GLONASS/GSM antenna that will sustain harsh environment.



- Low noise figure
- Fully weather proof IPX8 .
- Ultra-high Sensitivity
- Compact construction
- Excellent temperature stability

### Specifications:

PHYSICAL CONDITION	
Constructions:	Polycarbonate radome, detachable cable/connector for easy mount, rubber-O-ring between top radome and screw base for waterproof
Dimensions:	60mm(Dia.) x 18.5mm(H)
Weight:	65grams (w/o cable & connector).
Color:	Standard in ivory white, other colours available upon request.
Mounting:	Bulkhead mount with 0.8 inch threaded wing nut (standard accessory).
Cable & Connector	
RF cable:	RG174-3M or 5M
Pulling strength:	6 Kg @ 5sec. molded plastic on connector end for strain relief.
Connector	SMA(M) or Others
Antenna Element	
Center Frequency:	1575Mhz & 1596-1610 MHz
Polarization:	R.H.C.P. (Right Handed Circular Polarization).
Bandwidth	10 MHz min. @S11≤-10 dB, 24MHz typ. @S11<-8dB
Gain @ 10° Elevation:	2 dBi typical.
Axial Ratio:	3 dB max.
Output VSWR:	1.5 max
Output Impedance:	50 ohm
Low Noise Amplifier	
Power Gain:	1570 Mhz : 29db typ 1610 Mhz : 29db typ
Bandwidth:	50 MHz min.
Noise Figure:	1.5 typ

Outer Band Attenuation:	20 dB min. @ Fo +/-50 Mhz.
Supply Voltages:	2.3~5.5V DC.
Current Consumption:	2.5V : 6.6mA Typ. 3V: 10.6mA Typ. 4V: 14.6mA Typ. 5V: 20.6mA Typ.
Output Impedance:	50W ohm
<b>Overall Performance: (antenna element, LNA &amp; coax cable)</b>	
Center Frequency:	1570 ~1610 Mhz.
Gain:	At 90° vertical to sky 30 ± 4.5dBi (cable loss) Note:1 Mounted on the 60mm x 60mm square ground plane
Noise Figure:	2.0 max.
Axial Ratio:	3 dB max.
Bandwidth:	10MHz min.
VSWR:	2.0 max.
Output Impedance:	50W ohm
<b>Environmental</b>	
Operating Temperature:	-40°C~ +85°C.
Storage Temperature:	-40°C~ +90°C.
Relative Humidity:	95% non-condensing.
Water Resistance:	100% waterproof.
<b>GSM / CDMA / 3G /2.4G</b>	
Frequency	850/900/1800/1900/2170/2.4G
VSWR	2.0
Impedence	50Ω
Cable type	RG174
Cable length	3M or 5M
Connector	SMA(M) or Others

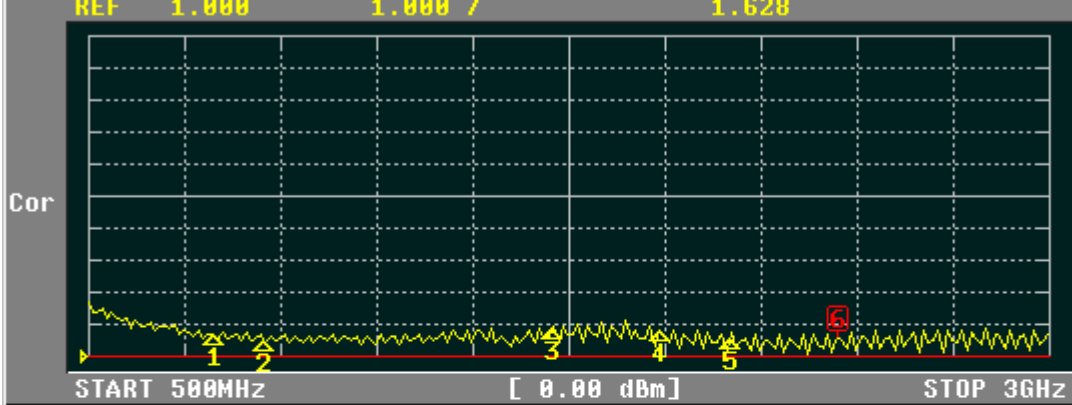
\* This specification is subject to change without prior notice

Data Updated: Jan.11, 2010





CH1 RFL SWR MKR 6: 2.45GHz  
 REF 1.000 1.000 / 1.628



START 500MHz [ 0.00 dBm] STOP 3GHz

CH1 MARKER LIST

1:	824.000MHz	1.706
2:	960.000MHz	1.477
3:	1.710 000GHz	1.867
4:	1.990 000GHz	1.767
5:	2.170 000GHz	1.525
6:	2.450 000GHz	1.629
7:		
8:		
9:		
10:		

- SWR <sup>[1]</sup>
- REAL <sup>[2]</sup>
- IMAG <sup>[3]</sup>
- PHASE <sup>[4]</sup>  
-∞, +∞
- LOG MAG & <sup>[5]</sup>  
PHASE
- LOG MAG & <sup>[5]</sup>  
DELAY
- LIN MAG & <sup>[7]</sup>  
PHASE
- More 2/2 <sup>[8]</sup>