

# Vehicle Locating & Marine Small

## GPS/ GLONASS Antenna

### MODEL: GA-65BG

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



- Low noise figure
- Fully weather proof.
- 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 45mm(H)
Weight:	65grams (w/o cable & connector).
Color:	Standard in ivory white or Black, other colours available upon request.
Mounting:	Bulkhead mount with 0.8 inch threaded wing nut (standard accessory).
Cable & Connector	
RF cable:	1.5 meter RG58 +BNC(M) other length (optional)
Pulling strength:	6 Kg @ 5sec. molded plastic on connector end for strain relief.
Connector	TNC(M)or SMA(M) or N(M) or -----
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

Filter	SAW Filter 30 dB min @ fo± 100MHz * fo=1590.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.IPX8
Water Resistance:	100% waterproof.

\* This specification is subject to change without prior notice

Data Updated: NOV.25, 2013

Technical drawing of a GPS/Glonass antenna. The drawing includes a top view showing concentric circles with diameters of 65.0, 42, 22, 63, 52, 42, and 32. A side view shows a height of 45 and a diameter of 21.50. A detail view shows a diameter of 19.5. A cross-section shows a thickness of 5 and a diameter of 20. A hexagonal detail is shown with a diameter of 26, 2, 59, and 53. A copper screw nut is shown with a diameter of 7 and a height of 15. A zinc alloy base is shown with a diameter of 1500.0 and a height of 7. A zinc alloy base is shown with a diameter of 1500.0 and a height of 7. A black heat shrink is shown with a diameter of 1500.0 and a height of 7.

8	RG58-BNC(M) OR TNC(M) OR SMA(M) OR —
7	Copper screw nut
6	White or Black revertex screw nut - PA777D plastic +UV
5	White or Black xi rubber against water cushion
4	White or Black PA777D plastic + UV
3	Zinc alloy base
2	Zinc alloy base
1	Black heat shrink

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TITLE : GPS or GPS/GLONASS Antenna		DWC NO. : GA658/BG-RG58-BNC(M) or TNC(M) or —	
TOLERANCE : AS SPEC.		FINISH : SEE TABLE	
DATE : 2013.11.25		UNIT : MM	
MATERIAL : SEE TABLE		ISSUED : BILL	
DRAWN : ALAN		CHECKED : LOUIS	

ITEM	DESCRIPTION	MAT'L	FINISH	ITEM No.
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