

# Marine GPS/GLONASS/VHF Antenna

**MODEL: GVA-680GL**

**FOR Marine VHF Radio & AIS SYSTEM**



## GPS 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 140mm(H)
Weight:	190grams (w/o cable & connector).
Color:	White or Black (Optional)
Mounting:	FB3A SUS L-mounting 1"-14 UNS threaded mast
Cable & Connector	
RF cable:	SMA(M)-10M RG58 OR CFD200 -TNC(M) or Optional
Pulling strength:	6 Kg @ 5sec. molded plastic on connector end for strain relief.
Connector available:	RG174-15CM-SMA(F)
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

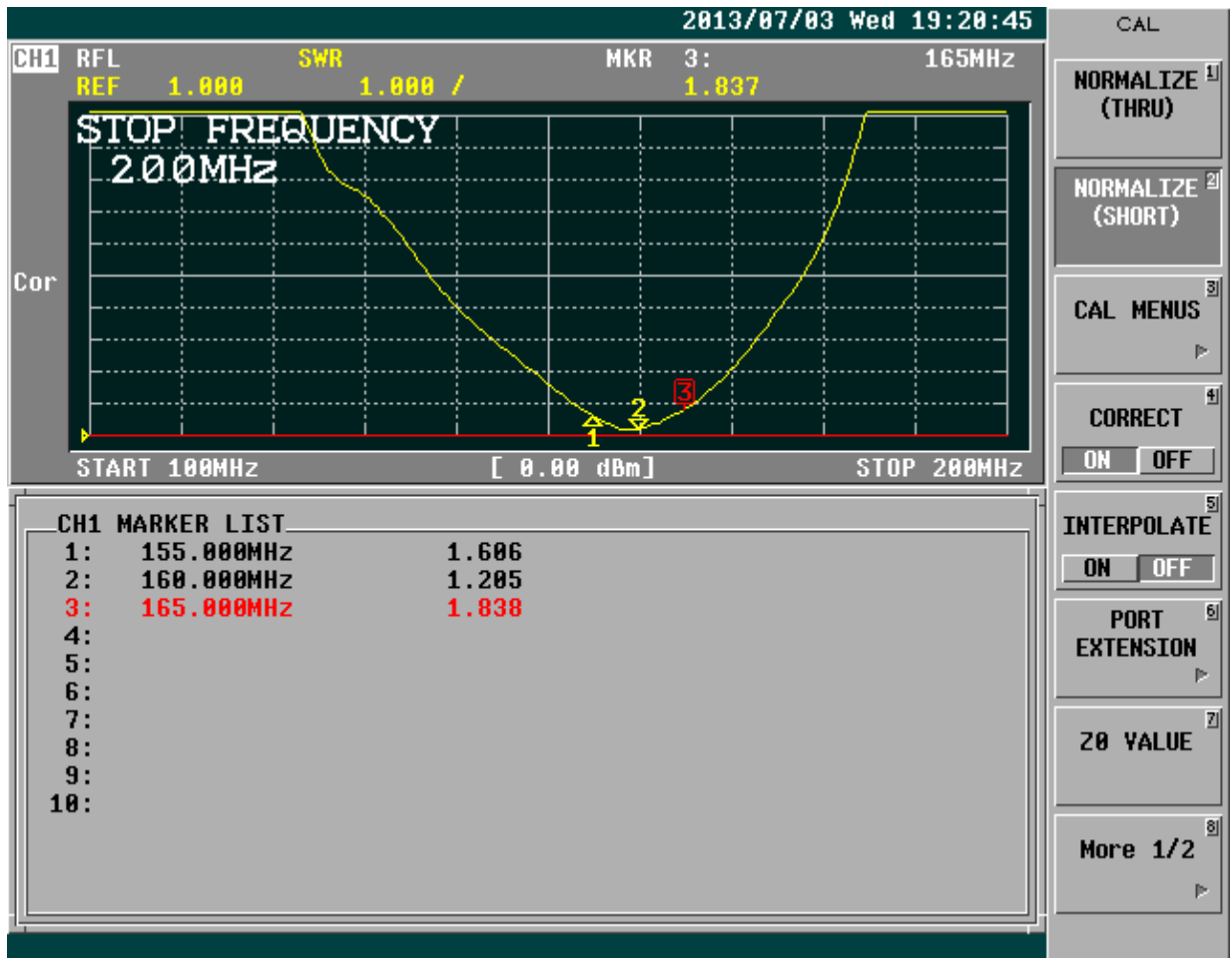
Filter	SAW Filter 30 dB min @ $f_o \pm 100\text{MHz}$ * $f_o=1590.\text{MHz}$
Supply Voltages:	2.3~5.5V DC.
Current Consumption:	2.5V : 6.6mA Typ. 3V: 10.6mA Typ. 4V: 14.6mA Typ. 5V: 20.6mA Typ.
Output Impedance:	50W ohm
<b>Overall Performance: (antenna element, LNA &amp; coax cable)</b>	
Center Frequency:	1570 ~1610 Mhz.
Gain:	At 90° vertical to sky $30 \pm 4.5\text{dBi}$ (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. IPX7

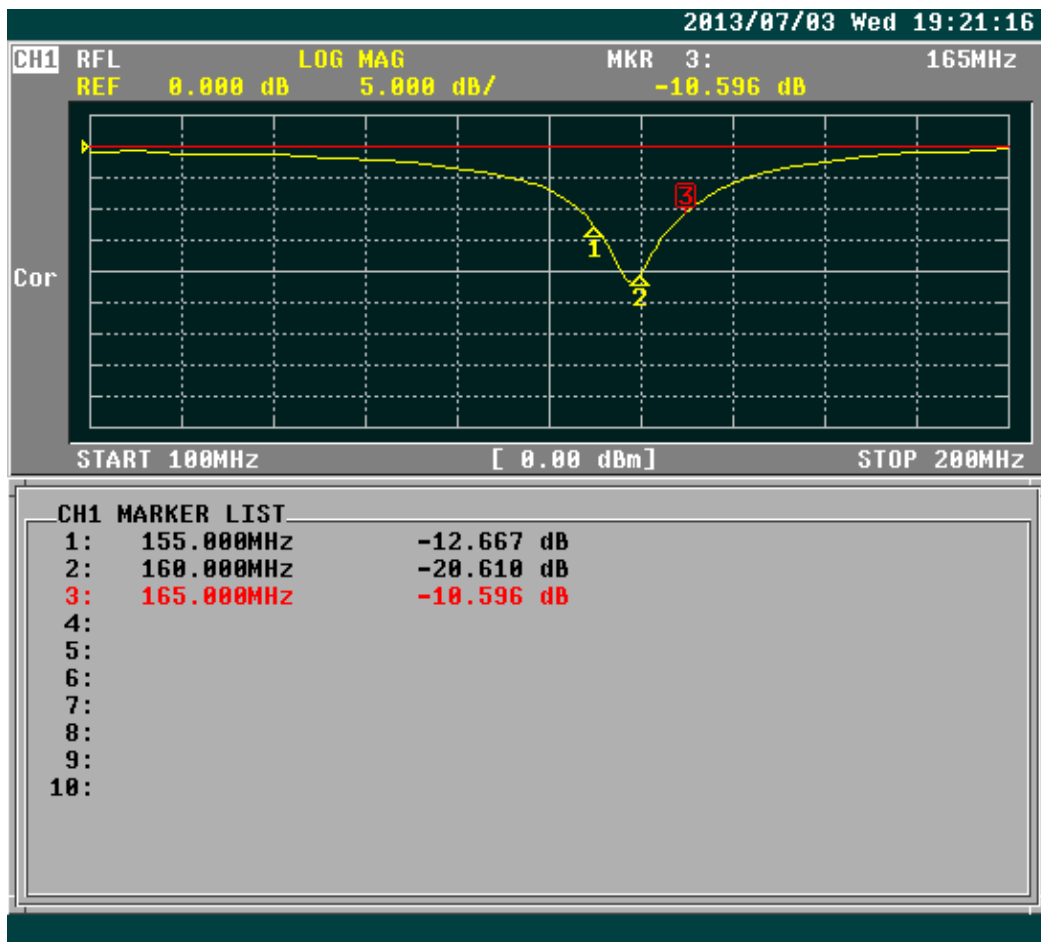
### Marine VHF Antenna Specifications:

<b>Marinr VHF ANTENNA</b>	
<b>Fr :</b>	<b>156 ~ 165 Mhz</b>
<b>Gain:</b>	<b>1dB</b>
<b>Configuration :</b>	<b>1/4 wave</b>
<b>VSWR</b>	<b>2.0:1</b>
<b>Impedence:</b>	<b>50 ohm</b>
<b>Connector:</b>	<b>RG174-15CM-SMA(F)</b>
<b>Ground</b>	<b>With FB3A Base mounting</b>

\* This specification is subject to change without prior notice

Data Updated: Nov.29, 2013





FORMAT

LOG MAG 1

PHASE 2

DELAY 3

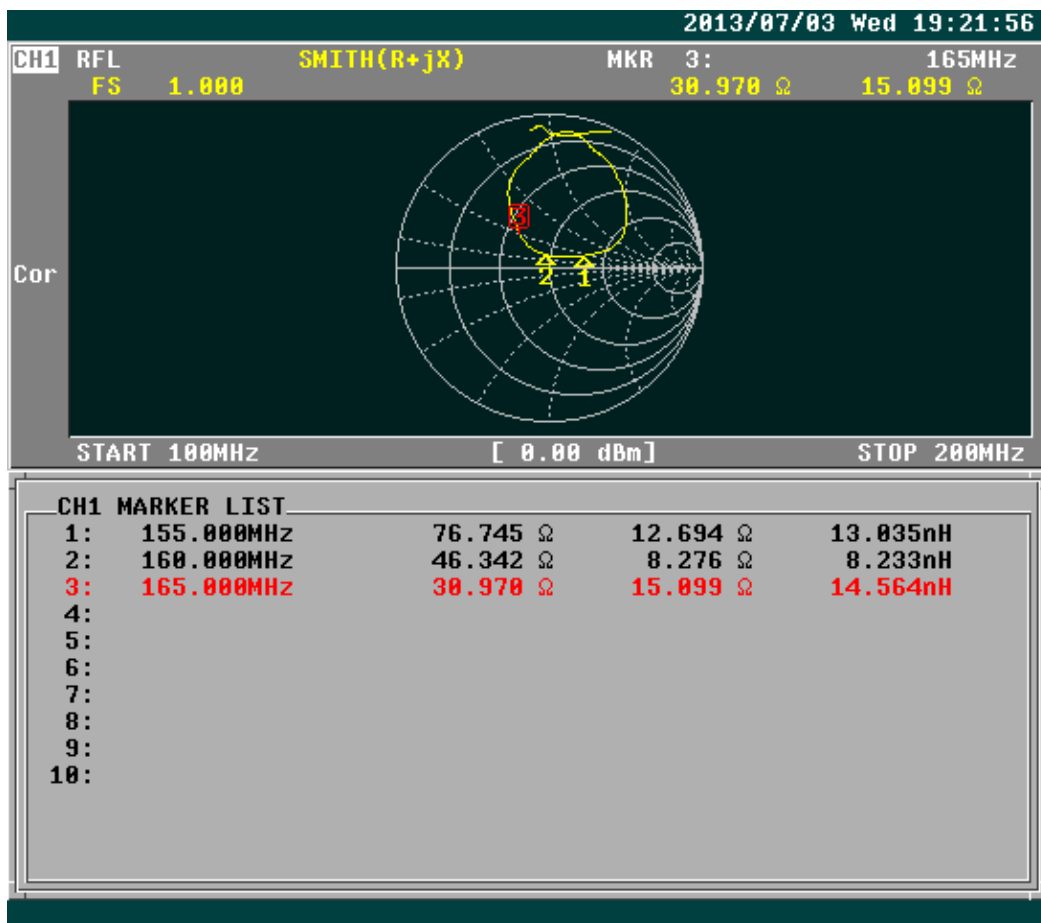
SMITH (R+jX) 4

SMITH (G+jB) 5

POLAR 6

LIN MAG 7

More 1/2 8



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SMITH (R+jX) 4

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More 1/2 8

# Marine Antenna Base mounting

MODEL: FB-3A



1"-14 UNS threaded mast SUS304/C3604

Locks on the truck rear-view mirror or on iron stand or flagpole



