Marine GPS/GLONASS Antenna

MODEL: MA-680G

Tapered size and ruggedness design, 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

The antenna system **MA-680G** is the integration of the high performance GPS/GLONASS patch antenna and a low noise amplifier into state-of-the-art low a very low profile/extremely compact/fully waterproof antenna signal enclosure. When connected to a GPS receiver with +3~5V DC antenna power it provide excellent signal amplification and out-band-rejection for that receiver.

Features:

GPS/GLONASS antenna with double threaded bolts and through holes for cable routing with course & fine treaded pitch locking for wing-nut fastener and lock-nut to prevent vibrations and un-authorize removal.

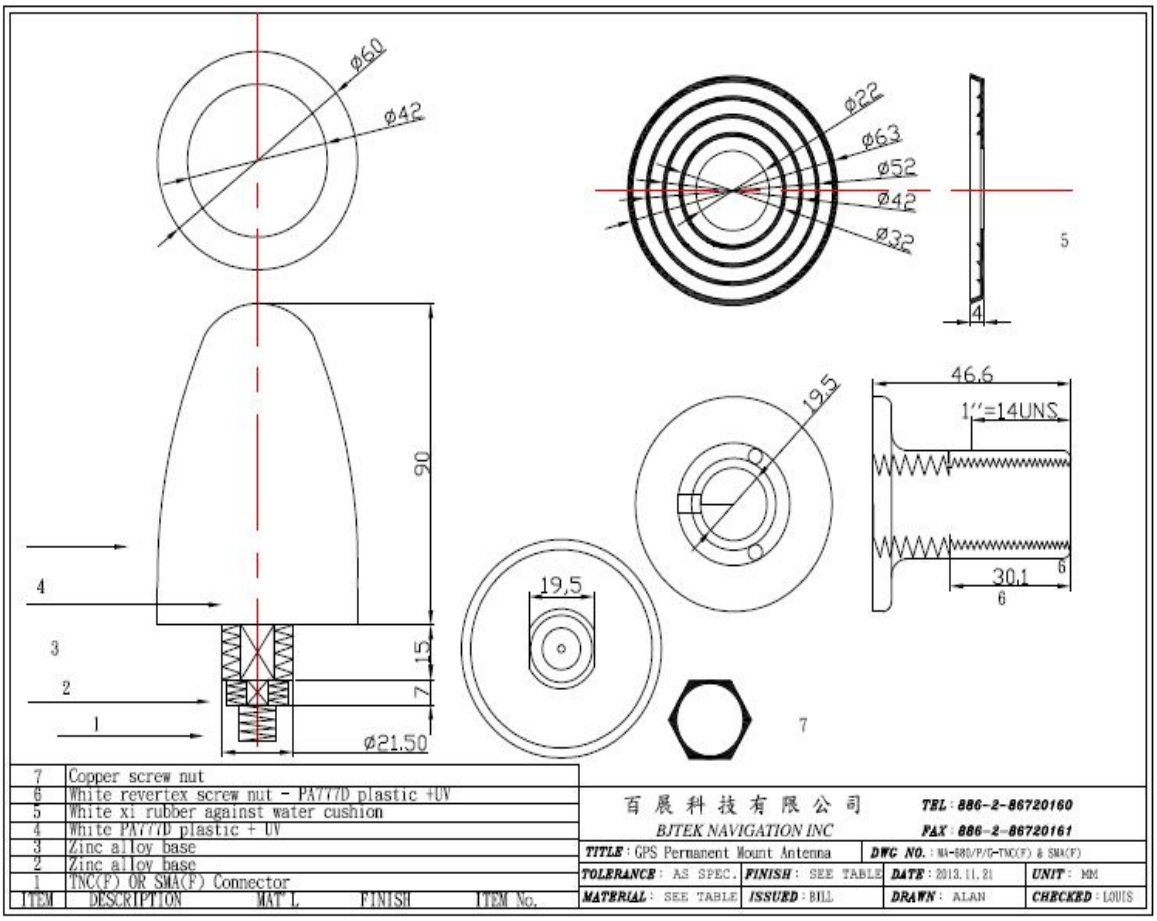
Specifications:

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:	200grams (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).
Mounting Adapters	Pole mount to 1"-14 UNS threaded mast
Base mounting	FB1 1"-14 UNS
Cable & Connector	
RF cable:	SMA(M) +10 meter RG58 +TNC(M) (standard) other length (optional)
Pulling strength:	6 Kg @ 5sec. molded plastic on connector end for strain relief.
Connector	SMA(F) or TNC(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 @ fo± 100MHz * fo=1590.MHz
Supply Voltages:	2.3~5.5V DC.
Current Consumption:	2.5V : 6.6mA Typ. 3V: 8.6mA Typ. 4V: 12.6mA Typ. 5V: 16.6mA Typ.
Output Impedance:	50W ohm
Overall Performance: (antenna element, LNA & coax cable)	
Center Frequency:	1570 ~1620 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
Environmental	
Operating Temperature:	-40°C~ +85°C.
Storage Temperature:	-40°C~ +90°C.
Relative Humidity:	95% non-condensing.
Water Resistance:	100% waterproof.

＊This specification is subject to change without prior notice

Data Updated: NOV.22, 2013



FB1 Base mounting