

# Outdoor GPS/ GLONASS Antenna

## MODEL: MA-650G-N(M)

Mushroom head shape and ruggedness, GPS/ GLONASS antenna that will sustain harsh environment. Demand of vehicle locating and marine navigation & Outdoor monitoring equipment, signal control, base station positioning...



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

### Specifications:

PHYSICAL CONDITION	
Constructions:	ASA radome
Dimensions:	60mm(Dia.) x 116.2mm(H)
Weight:	250grams
Color:	White-UV
Cable & Connector	
RF cable:	optional
Pulling strength:	6 Kg @ 5sec. molded plastic on connector end for strain relief.
Connector	N(M)
Antenna Element	
Center Frequency:	1575Mhz & 1596-1602 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:	1575 Mhz : 29db typ 1602 Mhz : 29db typ
Bandwidth:	50 MHz min.
Noise Figure:	1.5 typ
Filter	SAW Filter

Supply Voltages:	2.5~5.5V DC.
Current Consumption:	2.5V : 6.6mA Typ. 3V: 10.6mA Typ. 4V: 14.6mA Typ. 5V: 20.6mA Typ.
Output Impedance:	50 ohm
<b>Overall Performance: (antenna element, LNA &amp; coax cable)</b>	
Center Frequency:	1575 ~1602 Mhz.
Gain:	30 ± 4.5dBi 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~ +85°C.
Relative Humidity:	95% non-condensing.
Water Resistance:	100% waterproof. IPX7

\* This specification is subject to change without prior notice

Data Updated: NOV.10, 2018

