

OUTSIDE GPS/GSM Antenna

MODEL: GMA-650P

FOR Base Antenna or Marine GPS/GSM System



GPS Antenna Specifications: GA65P

Specifications	
Antenna Element	
Center Frequency	1575.42 MHz +/-1.023 MHz
Polarization	R.H.C.P. (Right Handed Circular Polarization)
Absolute Gain @ Zenith	+5 dBi typical Based on 70x70mm ground plane
Gain @ 10° Elevation	-1 dBi typical
Axial Ratio	3 dB max.
Output VSWR	1.5:1 Typ.
Output Impedance	50 ohm
Low Noise Amplifier	
Center Frequency	1575.42 MHz +/- 1.023 MHz
Power Gain	38db(3V) / 45db(5V) (Without cable +25°C±10°C)
Bandwidth	10 MHz min.
Noise Figure	1.6 Typ.
Outer Band Attenuation	20 dB min. @ Fo +/-50 MHz
Supply Voltages	3.0~5.0V DC
Current Consumption	21mA@ 3.0V DC,25mA@ 5.0V DC
VSWR	1.5 max.
Output Impedance	50 ohm
Overall Performance: (antenna element, LNA & coax cable)	
Center Frequency	1575.42 MHz
Gain	38db(3V) / 45db(5V) (Without cable +25°C±10°C)
Noise Figure	2.0 max.
Bandwidth	10 MHz min.
Axial Ratio	3 dB max.
VSWR	1.5 max.
Output Impedance	50 ohm
Environmental Conditions	
Operating Temperature	-30°C to +80°C
Storage Temperature	-40°C to +100°C

Relative Humidity	40% to 95% non-condensing	https://www.bjnav.com/
Water Resistance	100% waterproof	
Physical Constructions		
Dimensions	Antenna : 60mm(Dia.) × 45mm(H)	
Weight	65 grams (without cable)	
Standard Mounting	Bulkhead mount with 0.8 inch threaded wing nut (standard accessory).	
Cable & Connector		
RF Connector	SMA(F) or TNC(F)	
Cable Pulling strength	6 Kg @ 5sec. molded plastic on connector end for strain relief.	

Marine GSM Antenna Specifications: GSM-100

Frequency range:	850/900/1800/1900/2170Mhz
Gain:	7~9dBi
V.S.W.R:	<2.0
Impedence:	50 ohm
Connector:	N Type Female
Dimension:	756mm +/-10 x OD20mm
Weight:	0.76Kg
Polarization :	vertical
Power handling :	50W
Colour :	white
Rated wind velocity :	60m/s
Working Temperature :	-40~60°C
Lightning Protection :	Direct Ground

* This specification is subject to change without prior notice

Data Updated: FEB.05, 2010



Technical drawing showing multiple views of a GPS antenna assembly. Dimensions include diameters of 60, 42, 22, 53, 52, 42, 32, 26, 2, 59, 53, 19.5, and 21.50. A height of 45 is also indicated. A small hexagonal part is labeled 7.

7	Copper screw nut
8	White reverse screw nut - PA77D plastic +UV
5	White X1 rubber against water cushion
4	White PA77D plastic + UV
3	Zinc alloy base
2	Zinc alloy base
1	SMA(O) connector

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TYPE: GPS Permanent Mount Antenna	TYPE NO: BMS-0403 & BMS-0407	
TOLERANCE: AS SPEC	SYSTEM: SEE TABLE	DATE: 2007.04.26
MATERIAL: SEE TABLE	DESIGNER: BILL	DRAWN: ALAN
		CHECKED: LOUIS



NO.	NAME	Q, TY
01	Body	01
02	Cap	01
03	Tube aluminium	01
04	Round iron washer	01
05	Hexagonal nut	01
06	Clip retaining	02
07	U-Circlip	02
08	Hexagonal nut	02
09	Round iron washer	04
10	Hexagonal nut	04
11	Hexagonal plate hand	01

Exploded view diagram of the antenna assembly. A dimension of 756±10 is shown for the main body. A small L-shaped component is labeled 11.

 Third angle projection	CUSTOMER'S	MODEL	PARTS NUMBER	FREQUENCY	UNIT	SCALE	DATE	VERSION
				800/900/1800/1900/2170MHz	M/M		20070903	1
	TOLERANCE	X. XX±0.15	NAME	PARTS NUMBER	APPROVED	CHECKED	DRAWING	DESIGNED
	SURFACE ROUGHNESS	S	APPEARANCE					



