Vehicle Locating Small GPS/GSM/WIFI Antenna MODEL: GWA-620

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



- Low noise figure
- Fully weather proof IPX7.
- Ultra-high Sensitivity
- Compact construction
- Excellent temperature stability

The antenna system **GWA-620** is the integration of the high performance GPS 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 +2.5~ 5.5V DC antenna powers it provides excellent signal amplification and out-band-rejection for that receiver.

Features:

GPS 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.

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 18.5mm(H)			
Weight:	65grams (w/o cable & connector).			
Color:	White or Black (Optional)			
Mounting:	Bulkhead mount with 0.8 inch threaded wing nut (standard accessory).			
Cable & Connector				
RF cable:	RG174 / 5M or 3M,			
Pulling strength:	6 Kg @ 5sec. molded plastic on connector end for strain relief.			
Connector available:	SMA ,SMB,Fakra ,BNC,TNC,MMCX,MCX			
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.			
Gain @ 10° Elevation:	-1 dBi typical.			
Axial Ratio:	3 dB max.			
Output VSWR:	2.0			

Specifications:

Output Impedance:	50 ohm		
Low Noise Amplifier			
Center Frequency:	1575.42 +/- 1.023 MHz		
Power Gain:	28 db +/-3db		
Bandwidth:	10 MHz min. @S11≤-10 dB		
Noise Figure:	1.5		
Outer Band Attenuation:	3 dB max.		
Supply Voltages:	2.5~5.5V DC.		
Current Consumption:	at 2.5V 6.6mA Typ. at 3.0V 8.6mA Typ. at 4.0V 12.6mA Typ. at 5.0V 16.6mA Typ.		
Filter	20dB 25dB @ fo+/- 50MH 30dB 35dB @ fo+/- 100M * fo=1575.42MHz		
Overall Performance: (an	enna element, LNA & coax o	cable)	
Center Frequency:	1575.42 +/- 1.023 MHz		
Gain:	At 90° vertical to sky 30 ± 4.5 dBi (cable loss) Note:1 Mounted on the 60mm x 60mm square ground plane		
Noise Figure:	1.5 max.		
Axial Ratio:	3 dB max.		
Bandwidth:	10 MHz min. @S11≤-10 dB		
VSWR:	2.0 max.		
Output Impedance:	50 ohm		
Environmental			
Operating Temperature:	-40°C~ +100°C.		
Storage Temperature:	-40°C~ +100°C.		
Relative Humidity:	95% non-condensing.		
Water Resistance:	100% waterproof.		
GSM / CDMA / 3G /		WIFI	
Frequency 850/900/180	0/1900/2170 24	00~2500Mhz	
VSWR 2.0	2.0		
Impedence 50Ω	50!		
Cable type RG174		6174	
Cable length 5M or 3M Connector SMA Coding		l or 3M	
Connector SMA Coding		IA Coding or Others	

 \ast This specification is subject to change without prior notice



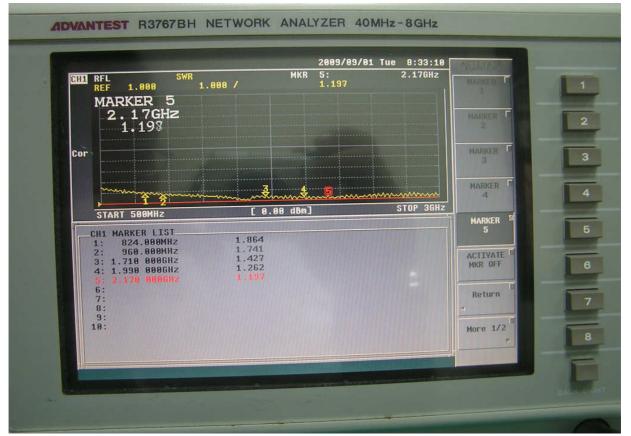


Data Updated: Aug.31, 2009

GPS TEST :

CH1 RFL SWR REF 1.000 1.000	MKR 1:	1 Tue 8:32:12 1.575GHz SWR	
		REAL	2
Cor		IMAG	3
	0	PHASE 9	
START 500MHz	[0.00 dBm]	STOP 3GHz	4
CH1 MARKER LIST 1: 1.575 000GHz 2:	1.233	PHASE	5
2: 3: 4: 5:		LOG MAG & ^{SI} DELAY	6
5: 6: 7: 8:		LIN MAG & PHASE	
8: 9: 18:		More 2/2	7
		Mule 272	8
			F
			BACK LIGHT

GSM TEST :



WIFI TEST :

2009/09/01 Tue 0:29: Diff RFL 0.000 MAG MKR. 3: 2.450H START FREQUENCY 2GHz 0	IZ HORHALIZE (THRU) HORHALIZE (SHORT) CAL MENUS	
---	--	--