Vehicle Locating Small GPS/GSM Antenna

MODEL: GAF-65

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



- Low noise figure
- Fully weather proof IPX8.
- Ultra-high Sensitivity
- Compact construction
- Excellent temperature stability

The antenna system **GAF-65** 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.

Specifications:

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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 45mm(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	
BITEK Navigation Inc. Output Impedance:	50 ohm https://www.bjnav.com	

BITEK Nevigation Inc. Low Noise Amplifier	https://www.bjnav.com	
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+/- 50MHz 30dB 35dB @ fo+/- 100MHz * fo=1575.42MHz	
Overall Performance: (antenna element, LNA & coax cable)		
Center Frequency:	1575.42 +/- 1.023 MHz	
Overall Performance: (an	30dB 35dB @ fo+/- 100MHz * fo=1575.42MHz tenna element, LNA & coax cable)	

Overall Performance: (an	verall Performance: (antenna element, LNA & coax 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 /	SM / CDMA / 3G /	
Frequency	850/900/1800/1900/2170	
VSWR	2.0	
Impedence	50Ω	
Cable type	RG174	
Cable length	5M or 3M	
Connector	SMA Coding or Others	

 $[\]ensuremath{\ast}\xspace$ This specification is subject to change without prior notice

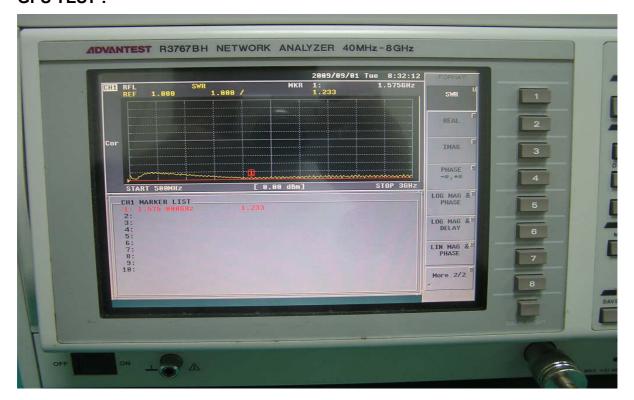




BJTEK Navigation Inc.

Data Updated: Sep.23, 2009

BITEK Navigation Inc. GPS TEST:



GSM TEST:

