

SPECIFICATION

Part No. : **GA.107**

Product Name : Magnetic Telematic Cellular Penta-band

Antenna

Feature : Delivers high performance for all 2G/3G/3.5

networks worldwide. 800MHz to 2200MHz.

Magnetic mount

Custom cables and connectors available

RoHS





I Introduction

The GA.107 magnetic cellular band antenna delivers marked improvements in efficiency and gain across all common frequencies in use for cellular bands today. Now one antenna can be used in place of multiple part numbers. Small enough to be used indoors and outdoors, the antenna performance has been designed to take advantage of any metal plate (ground-plane) it attaches to deliver best of class performance. A reliable return loss of <10dB when mounted on a metal plate ensures it complies with the industry standards set by module makers and networks worldwide.



IISpecification

Communication System	Penta-band Cellular				
	AMPS	GSM	DCS	PCS	UMTS
Frequency (MHz)	824 ~ 896	880~960	1710~1880	1850~1990	1710~2170
Average Efficiency (free space)	35%	45%	21%	22%	22%
Average Efficiency (mount on metal)	44%	40%	24%	26%	26%
Gain (dBi) (free space)	2.6	5.0	-2.2	-2.3	-2.1
Gain (dBi) (mounted on metal)	0.1	-0.3	-1.0	-1.0	-0.7
Impedance	50 Ohm				
Radiation Pattern	Omni-directional				
Polarization	Linear				
VSWR	< 2.0 : 1				
Operation Temperature	-40°C ~ +85°C				
Storage Temperature	-40°C ~ +105°C				
Antenna Material	300 series stainless steel with black Duracoat finish				
Antenna Height	12cm				
Weight	60g without cable connector				
Cable Available	RG-174 / RG-178				
Connector Available	SMA / SMB / SMC / TNC / FME / MCX / MMCX / N-type / Fakra				

^{*}Note – RF characteristic shown in this data sheet is measured with 3m RG-174 and SMA(M) connector in room temperature.



III Electrical Characteristic

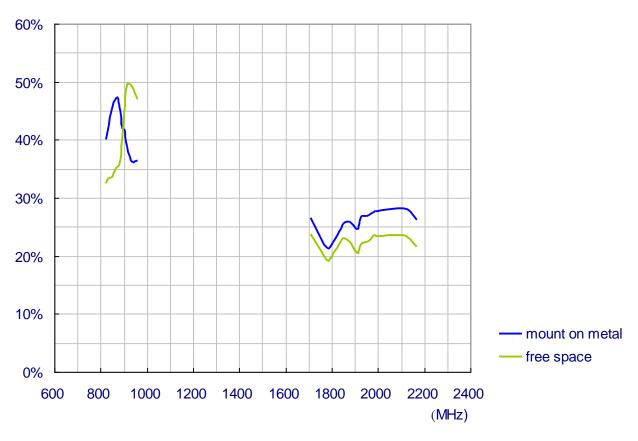
III.1 Return Loss



The highlighted parts are cellular operation frequency.

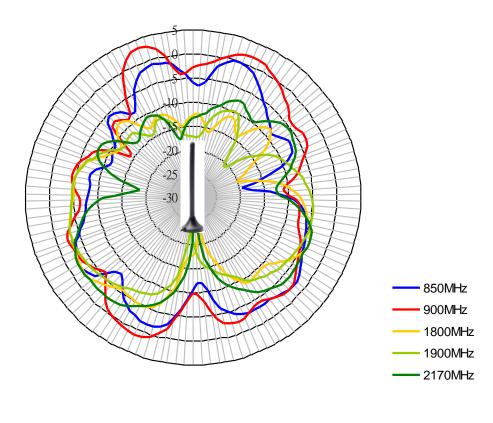


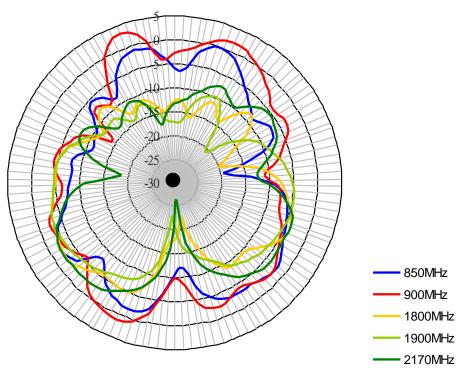
III.2 Efficiency





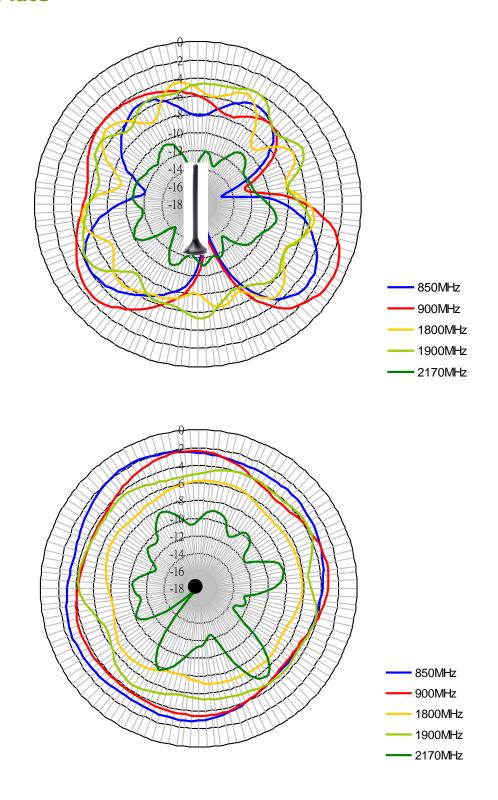
III.3 Free Space Radiation Pattern





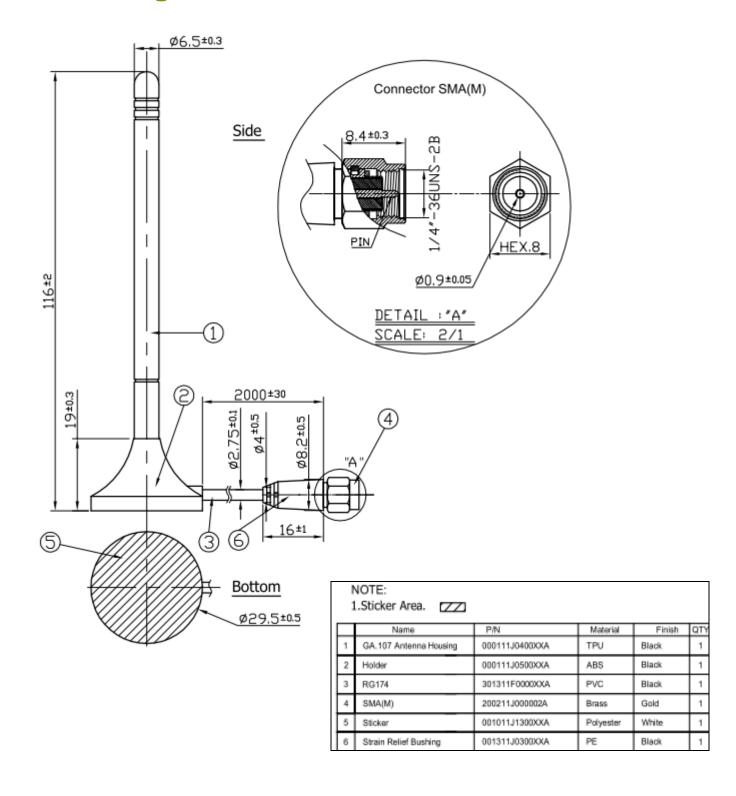


III.4 Radiation Pattern of GA-107 Mounted on Metal Plate





IVDrawing





V Packaging

