

# AR-4 GPS and GSM Dual Antenna



### **Features**

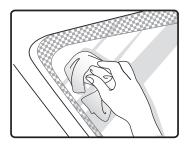
- Window mount
- Compact size
- Easy to install
- 10 watt RF protection design
- Wide power supply range and short-circuit protection
- 3 signal noise filters and 2-stage LNA
- Silver-coated conducting pin
- Double-shielding cable
- RoHS compliant

# **Specifications**

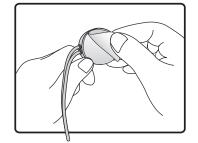
Architecture		
RF protection (10 watt)		
2 Stages active LNA (Low Noise Ampfiler)		
Dual Filters, (HPF & LPF (Lump element))		
Dielectric Patch antenna		
Low Noise Low drop-out, Linear Regulator		
GPS receiver short circuit protect		
Low Loss RG/174 Coax cable		
Aluminum Base/ PC+ Radome Plastic		
Mechanical & Environmental		
Dimensions	50.10 x 16.55 mm	
Weight	180 g	
Color	Black	
Operating Temperature	-40 to +85° C	
Humidity	40% to 95% RH	
Storage Environment		
Temperature	-40 to +85° C	
Humidity	40% to 95% RH	
Output Terminal		
Coax Cable	RG-174U double shielded 5m, Low Loss 0.7dB/m	
Coax Connector	BNC SMB Fakra SMA MCX MMCX GT5 or on request	
Cable Length	3M, 5M or upon request	
Cable Color	Black	
Electrical Specification		
Note: All value are defined at 25±15° C ,65±20 % RH unless otherwise noted.		
Note: Antenna characteristics are measured with 70x70 mm ground plane in an anechoic chamber.		

GPS ANTENNA	
Center Frequency	1575.42±1.023 MHz
Bandwidth	10 MHz @ -3dB point
Polarization	R.H.C.P
Axial Ratio	2.0 dB max
Over-Current	Thermal Over-current shutdown >+150° C
RF noise protection	RF protection(10watt), nano-second Spark-Gap
Coax Cable	RG-174U double shielded 5m, Low Loss 0.7dB/m
LNA	
Center Frequency	1575.42±1.023 MHz
Over-all Gain	28dB (typical including 4dB cable loss & Filters)
Over-all NF	<1.8dB @fo, 2dB max.
Output V.S.W.R	1.5 dB max
LNA Characteristic	K=>1 Un-conditionally Stable
Voltage	+3 Vdc to + 6 Vdc input, Auto Switching
Current	11~13mA±2
GSM ANTENNA	
Frequency	GSM: 900~1800/ 850~1900 MHZ
VSWR	1.5MAX
IMPEDENCE	50Ω
Polarization	R.H.C.P
Gain	3dBi
Power handling capacity	40 W

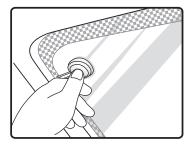
## **Installation Procedure**



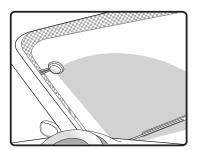
**Step 1:** Clean the inside of the windshield.



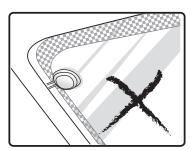
**Step 2:** Peel off the adhesive tape cover.



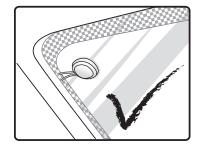
**Step 3:** Push the antenna firmly into position.



**Step 4:** Do not mount within the wiper movement arc area.



**Step 5:** Do not mount on the tinted area



**Step 6:** The adhesive tape side is the active side and must face the sky.

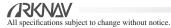
#### Note 1:

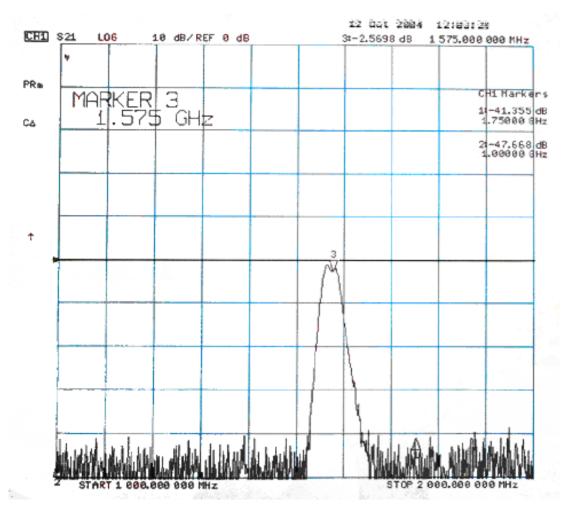
Avoid running the antenna cable next to antenna cables from two way radios, cell phones etc. Do not lengthen/shorten the shielded antenna cable.

Take special care when plugging and unplugging the antenna connector.

Take care not to place the antenna under a structure such as a metal roof-rack.

**Note 2:** If you want to mount the antenna on the dashboard, please check with your sales representative for dash-board-mount version





### **Active-1 PLOT-2**

