

GPS RADIONOVA® M10214-A1 RF Antenna Module

Antenova's **GPS RADIONOVA® M10214-A1 RF Antenna Module** is the world's first single package solution to combine RF and passive antenna on the same module. The **GPS RADIONOVA® M10214-A1** is a flash based highly integrated GPS RF Antenna Module suitable for L1-band GPS and A-GPS systems. The device is based on the high performance SiRFstarIII™ GPS architecture combined with Antenova's high efficiency complementary antenna technology.

All front-end components are contained in a single package laminate base module for optimum performance. The **GPS RADIONOVA® M10214-A1** operates on a single 3.6V positive bias supply with low power consumption and available low power modes for further power savings. M10214-A1 is supported by SiRF stand alone software and uses a UART as the host processor interface.

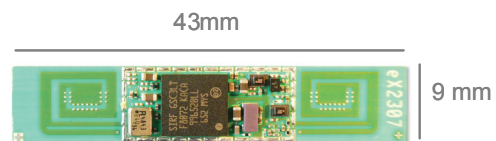
Providing a true drop in solution with the antenna and RF in a single package, **GPS RADIONOVA® M10214-A1** offers ease of integration and shorter design cycles for faster time to market.

Applications:

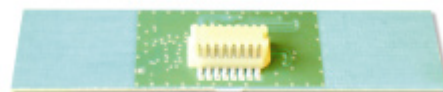
- Personal Navigation Devices (PNDs)
- Portable Media Players (PMPs)
- Personal Digital Assistants (PDAs)
- Feature phones and Smart Phones

Features:

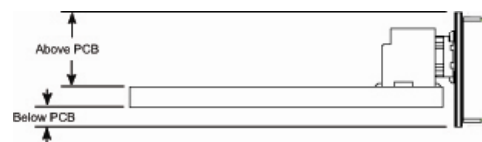
- Low cost single package RF Antenna Module
- SiRFstarIII™ GPS Chipset Architecture
- Low current consumption
- Built-in filter allows co-existence with GSM/CDMA/WCDMA/WLAN/BT
- Resistant to de-tuning



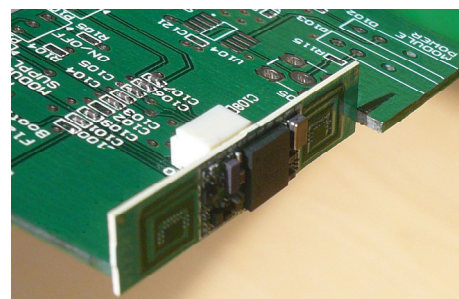
Top view
(w/o shielding can)



Bottom view



Typical Mount
(Side view)



Vertical Mount
(with optional cut-out)

Antenova is a certified SiRF Value
Added Manufacturer (VAM)



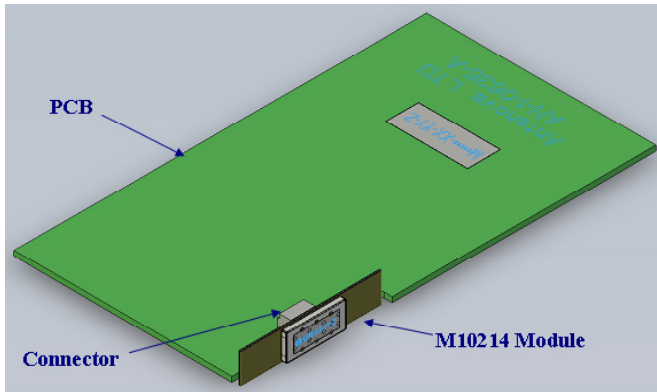
electrical

Frequency:	1575 MHz
Supply Voltage	3.6V
Supply Current:	30mA
Hibernate Current:	30 uA
COM Interface:	UART
Output Protocol:	SiRF Binary / NMEA 0183
Temperature:	-40°C to +85°C

mechanical

Dimensions :	43 x 9 x 4mm (w/metal enclosure)
Mounting:	Vertical mount / low profile connector
Groundplane:	20 x 40mm min

Typical RF Antenna Module Placement



Front View



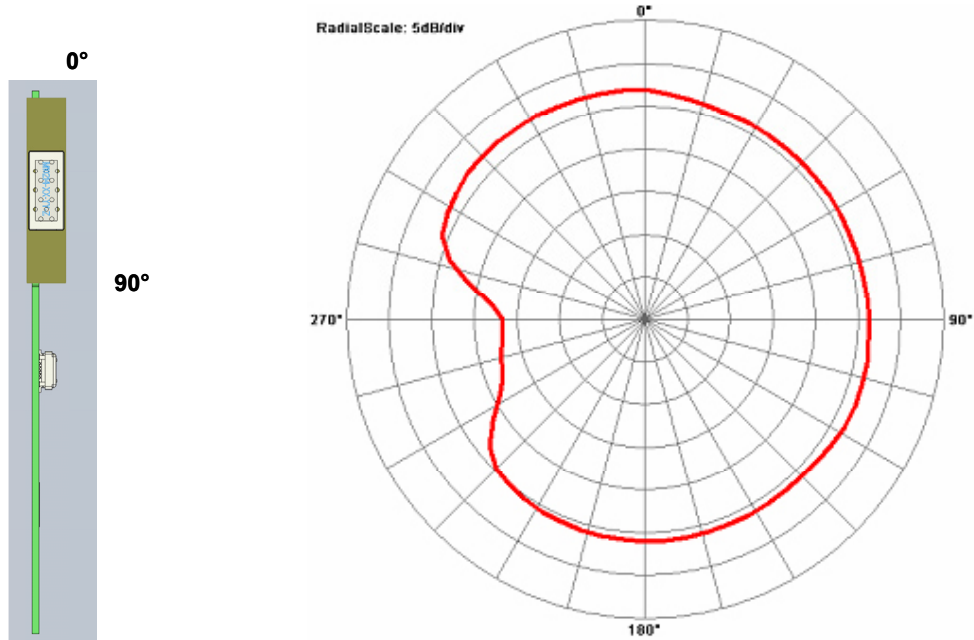
Back View



Side View



Typical Chamber Performance



Note: Radiation pattern measured on Antenova's standard test board. Tuning may be needed in product integration to adjust radiation pattern.



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