

GPS RADIONOVA® M10264 RF Antenna Module

Antenova's **GPS RADIONOVA® M10264 RF Antenna Module** is a single package solution to combine RF and passive antenna on the same module. The **M10264** is a 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 antenna technology, and is designed to provide an optimal radiation pattern for GPS reception.

All front-end components are contained in a single package laminate base module, providing a complete GPS receiver for optimum performance. The **M10264** operates on a single 3.6V positive bias supply with low power consumption and available low power modes for further power savings. The **M10264** is supported by SiRF stand alone software and uses a UART as the host processor interface. The **M10264** also supports active external antennas with bias current supply.

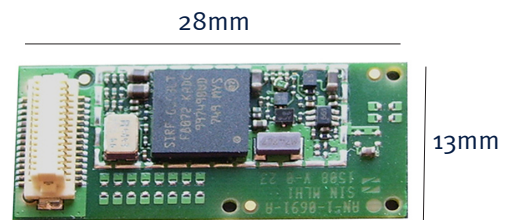
Providing a true drop in solution with the antenna and RF in a single package, **GPS RADIONOVA® M10264** offers ease of integration and shorter design cycles for faster time to market.

Applications:

- Personal Navigation Devices (PNDs)
- Portable Media Players (PMPs)

Features:

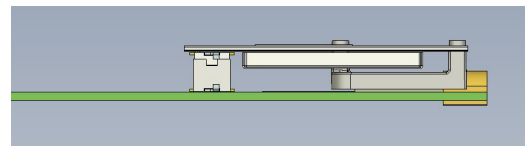
- Low cost single package RF Antenna Module
- SiRFstarIII™ GPS Chipset Architecture
- Low 4.7mm height for thin devices
- Low current consumption
- External antenna support
- Resistant to de-tuning



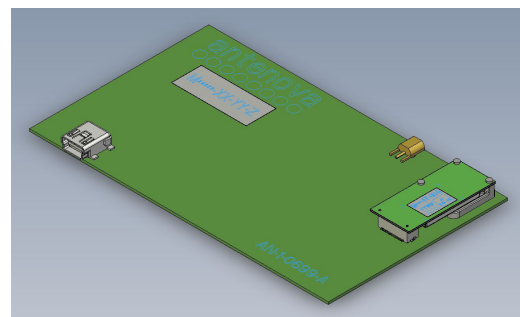
Bottom (Component Side View)
(w/o shielding can)



Top (Antenna Side View)



Typical Planar Mount
(Side view)



Typical Placement on PCB

GPS RADIONOVA® M10264 RF antenna module

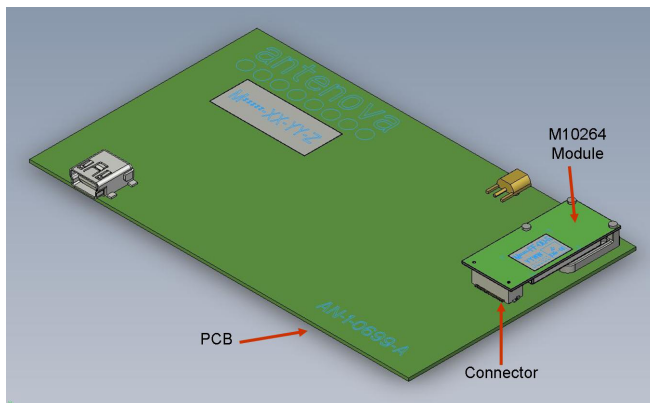
electrical

Band:	GPS L1
Supply Voltage	3.6V
Supply Current:	50mA
Hibernate Current:	30 µA
COM Interface:	UART
Output Protocol:	SiRF Binary / NMEA 0183
Temperature:	-40°C to +85°C

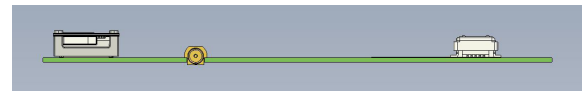
mechanical

Dimensions :	29 x 13 x 4.7mm
Mounting:	Planar mount / low profile
Connector:	30pin board-to-board
Groundplane:	40 x 30mm min

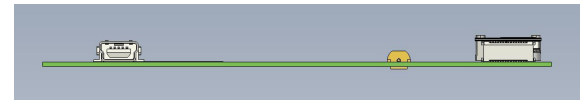
Typical RF Antenna Module Placement



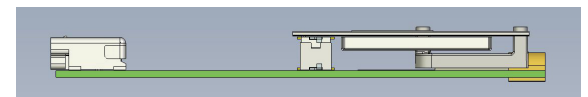
Front View



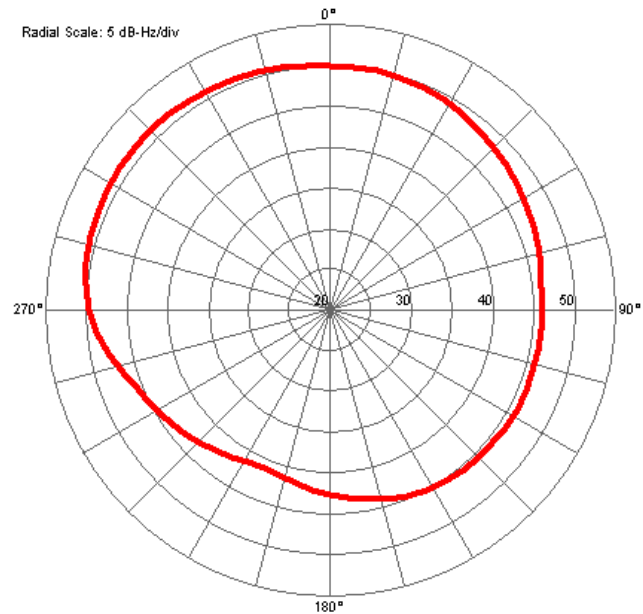
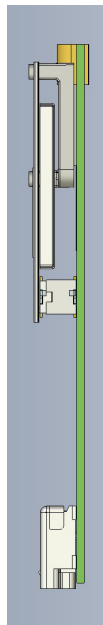
Back View



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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The information provided in this document was correct at the time of going to print