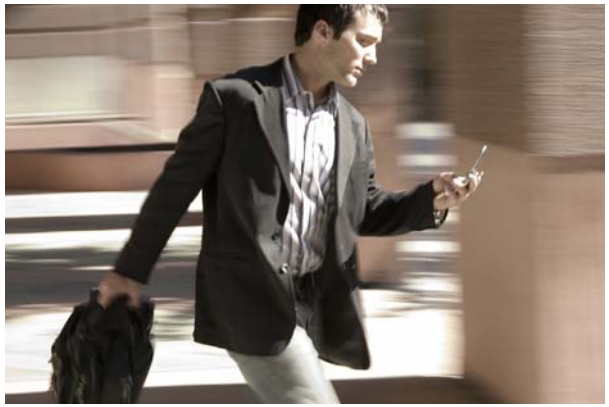
Antennas for Wireless M2M Applications



Antenova M2M, the antennas for wireless M2M applications company, offers an extensive range of high performing RADIONOVA® RF Antenna Modules for wireless M2M and embedded device applications.

RADIONOVA RF Antenna Modules provides convenience:

- Ease of integration: 'Drop-in solution'
- Reduced space needed on PCB as radio and the antenna share the same volume
- All RF and antenna designed and tested by Antenova
- Less man-hours on design, integration and system testing time required
- Shorter time-to-market

GPS RADIONOVA is a complete GPS RF system solution in a single module containing:

- GPS IC and RF components
- Antenova's novel and patented antenna technologies
- Pre-optimized for improved system efficiency
- Omni-directional characteristics provide good performance in all device orientations
- Overall system performance better than larger and heavier ceramic patch antennas

No matter how impressive the design, optimal performance and effective communication can only be achieved with the right antenna or RF antenna module.

Antenova M2M offers a full range of integration support and RF testing to help reduce design risks, integration mistakes, customization, design costs and accelerate your time to market.

Make Antenova M2M your partner of choice from new product development through the full life cycle of your product. To find out more, email sales@antenova-m2m.com.

www.antenova-m2m.com

Antenova M2M's RADIONOVA RF Antenna Module Quick Guide

GPS RADIONOVA RF Antenna Modules

		Connector	SMD	SMD	SMD	SMD	SMD
							
Product No.		M10372	M10382	M10477	M10478-A1	M10478-A2	M10478-A3
Architecture		Ant + RF + BB	Ant + RF + BB	Ant + RF + BB	Ant + RF + BB	Ant + RF + BB	Ant + RF + BB
GPS Chipset		SiRFstarIV GSD4e	ublox G6010-ST	SiRFstarIV GSD4e	SiRFstarIV GSD4e	MediaTek MTK3337	MediaTek MTK3333
Frequency		1575 MHz	1575 MHz	1575 MHz	1575 MHz	1575MHz	1575-1609 MHz
Dimensions (mm)		28 x 13 x 5	24.2 x 9.9 x 3.9	24.2 x 9.9 x 3.8	13.8 x 9.5 x 1.8	13.8 x 9.5 x 1.8	13.8 x 9.5 x 1.8
Antenna Bandwidth		30 MHz	30 MHz	30 MHz	30 MHz	30 MHz	45 MHz
Omni-directional Antenna		✓	✓	✓	✓	✓	✓
External antenna support		✓	✓	✓	✓	✓	✓
Average antenna gain equivalent to ceramic antenna		~ 17 x 17 x 4	13 x 13 x 4	~ 17 x 17 x 4	~ 17 x 17 x 4	~ 17 x 17 x 4	~ 17 x 17 x 4
Power Consumption	Acquisition	40mA	50mA	40mA	40mA	31mA	38mA
	Tracking	40mA	40mA	31mA	31mA	24mA	28mA
	Sleep mode	40uA	25uA (Battery Backup)	20uA	20uA	<200uA	<350uA
Host Interface		UART / SPI / I2C CMOS 1.8V	UART / SPI / I2C/DDC/ USB CMOS 1.8V/3.3V	UART / SPI / I2C CMOS 1.8V	UART / SPI / I2C CMOS 1.8V	UART CMOS	UART CMOS
Baud Rate (bps)		4800	9600	4800	4800	User Config.	User Config.
Data Output Protocol		NMEA 0183 / Binary	NMEA 0183 /UBX	NMEA 0183 / Binary	NMEA 0183 / Binary	NMEA 0183 / Binary	NMEA 0183 / Binary
Sensitivity	Acquisition	-148 dBm	-147 dBm	-147 dBm	-147 dBm	-148 dBm	-148 dBm
	Tracking	-163 dBm	-160 dBm	-163 dBm	-163 dBm	-165 dBm	-165 dBm
Typical Applications		Smart Watches Tracking Devices Portable AVL Medical / eHealth	Smart Watches Tracking Devices Portable AVL Medical / eHealth	Smart Watches Tracking Devices Portable AVL Medical / eHealth	Smart Watches Tracking Devices Portable AVL Medical / eHealth	Smart Watches Tracking Devices Portable AVL Medical / eHealth	Smart Watches Tracking Devices Portable AVL Medical / eHealth

Implementation support

Antenova M2M offers excellent technical support to ensure a secure and reliable implementation, which includes design guidelines, advanced measuring equipment and custom tuning. We highly recommend our customers to use our know-how when it comes to implementing the antenna and RF Antenna Modules.

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