



GPS and GNSS Antenna Modules

SMD

Illustration (not to scale)		
Part number	M20048-1	M20050-1
Architecture	Ant + RF + BB	Ant + RF + BB
GPS Chipset	Mediatek MT3337-E	Mediatek MT3333
Frequency	1575 MHz	1559—1609 MHz
Dimensions (L x W x H in mm)	13.8 x 9.5 x 1.8	13.8 x 9.5 x 1.8
Antenna Bandwidth	30 MHz	50 MHz
Omni-directional antenna	√	√
External antenna support	√	√
Average antenna gain, equivalent to ceramic antenna	17 x 17 x 4 mm	17 x 17 x 4 mm
Power consumption: acquisition, tracking, sleep mode	31mA, 24mA, <200uA	38mA, 28mA, 350uA
Host Interface	UART CMOS 3.3v	UART CMOS 3.3v
Baud rate (bps)	4800 / 9600 / 38400 / 115200	9600
Data output protocol	NMEA 0183	NMEA 0183
Sensitivity: acquisition / tracking	-148dBm / -165 dBm	-148dBm / -165 dBm
Typical applications	tracking devices, PNDs, OBD2, mHealth	tracking devices, PNDs, OBD2, mHealth

Implementation Support





Contact us

Antenova offers a full range of development support and RF testing to help reduce customization, design costs and accelerate your time to market. Antenova recommends customers to use our know-how when it comes to implementing the antenna. We offer advanced measuring equipment, custom tuning and technical support to obtain a secure and reliable implementation. Make Antenova your partner of choice for new product development. Contact sales@antenova.com, and why not join our antenna design community at ask.antenova.com.

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GPS and GNSS Modules

SMD

Illustration (not to scale)				
Part number	M10578-A2	M10578-A3	M20047-1	M20057-1
Architecture	RF + BB	RF + BB	Antenna + RF	Antenna + RF
GPS Chipset	Mediatek MT3337-E	Mediatek MT3333	Epcos GNSS	Epcos GNSS
Frequency	1575 MHz	1559—1609 MHz	1559-1609 MHz	1559-1609 MHz
Dimensions (L x W x H in mm)	9.0 x 9.0 x 1.8	9.0 x 9.0 x 1.8	7.0 x 7.0 x 1.1	7.0 x 7.0 x 1.1
Bandwidth	30 MHz	50 MHz		
External antenna support	√	√		
Power consumption: acquisition, tracking, sleep mode	31mA, 24mA, <200uA	38mA, 28mA, 350uA	(LNA) 2.5mA	(LNA) 2.5mA <i>As M20047-1, SAW and LNA reversed</i>
Host Interface	UART CMOS 3.3v	UART CMOS 3.3v	-	-
Baud rate (bps)	4800 / 9600 / 38400 / 115200	9600	-	-
Data output protocol	NMEA 0183	NMEA 0183	-	-
Sensitivity: acquisition / tracking	-148dBm / -165 dBm	-148dBm / -165 dBm	LNA Gain 19.6 dBm	LNA Gain 19.6 dBm
Typical applications	Tracking devices, PNDs, OBD2, mHealth		Tracking devices, sports wearables, telematics	

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