Mobile GNSS Antenna with LNA

Model: MA-28TA

WI-RD-D-092 V1.0

Compact & Sensitive GNSS antenna with ESD Circuit Protection for Mobile Applications

Overview:

MA-28TA is the most compact GNSS antenna available on the current market. Its state-of-the-art technology allows for miniature without. With good coverage almost all the way to the horizon, it performs excellently in foliage or urban canyon environment even in the presence of electromagnetic interference!

Featuring diminutive and rugged enclosure and unparalleled performance , including GPS, GLONASS, BDS , Galileo and QZSS, MA-28TA is compatible with almost every GNSS receiver model on the markets and provides an excellent alternative for a vast range of GNSS applications including AVL, Vehicle Navigation, Aviation, and Military.

Features:

- Diminutive & rugged construction allows for military and other applications demanding high degree of confidentiality.
- Compact Construction/ Low Profile/ Anti-interference
- Magnet Mount Base
- Ideal for PDA, HPC, and other computing devices in GNSS applications.
- Water Resistance
- Supports GPS L1/GLONASS G1/BDS B1/Galileo E1/QZSS L1 systems

Applications:

- Automobile GNSS Receiver/Car Tracking Navigation System
- AVL / Fleet Management Systems

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- External Antenna for Handheld GNSS and Navigator

Specification:

Physical Condition		
Construction	Polycarbonate- radome at top, die-cast shell at bottom/ rubber gasket for water seal in between	
Dimension	46mm (L) x 38mm (W) x 12.5mm (H)	
Weight	50 grams (excluding cable & connector)	
Standard Mounting	Magnet mount with two magnets & screw mount	
Optional Mounting Plate	Customized metal sheet	
ESD circuit protection	16 KV Air Discharge , 8 KV Contact Discharge	
Cable & Connector		
RF Cable	5 meter RG174/U (standard) cable, other length available	
Pulling Strength	6 Kg @ 5sec with molded plastics on connector end for strain relief	
Connector Available	BNC,TNC,FME (to be adapted), GT5, MCX (OSX), SMA, SMB or SMC in straight or right angle	
Optional Adapters	Universal Connector Adapter (FME to TNC/BNC/SMA/SMB/MCX)	
Antenna Element		
Polarization	R.H.C.P. (Right Handed Circular Polarization)	
GNSS Reception	GPS L1,GLONASS G1, BDS B1,Galileo E1,QZSS L1	
Gain @ Zenith	1575.42 MHz	3.1 dBic typical
	1561 MHz	2.3 dBic typical
	1602 MHz	-2.2 dBic typical
Axial Ratio	3 .0dB max. Mounted on the 70mm × 70mm square ground plane	
Low Noise Amplifier		
Gain	32dB @ 5V typically (1575MHz)	
Bandwidth	51 MHz min. @S11≤-10 dB	
Noise Figure	3.3 dB Typical	
Supply Voltages	3 ~5.5V DC	
Current Consumption	14mA Typical.	
Output Impedance	50 ohm	
Output VSWR	2.0 max.	
Overall Performance（Antenna Element, LNA）		
Center Frequency	1575.42 MHz & 1561 MHz & 1598~1606 MHz	
Gain	At 90° 32 dB(without cable loss) note:1 Mounted on the 70mm x 70mm square ground plane	
Output Impedance	50 ohm	
VSWR	2.0 max.	
Environmental Conditions		
Operation temperature	-40°C to +85°C	
Storage temperature	-40°C to +85°C	
Relative Humidity	95% non-condensing	

Note:1:Cable loss-(-1.2dB/m)

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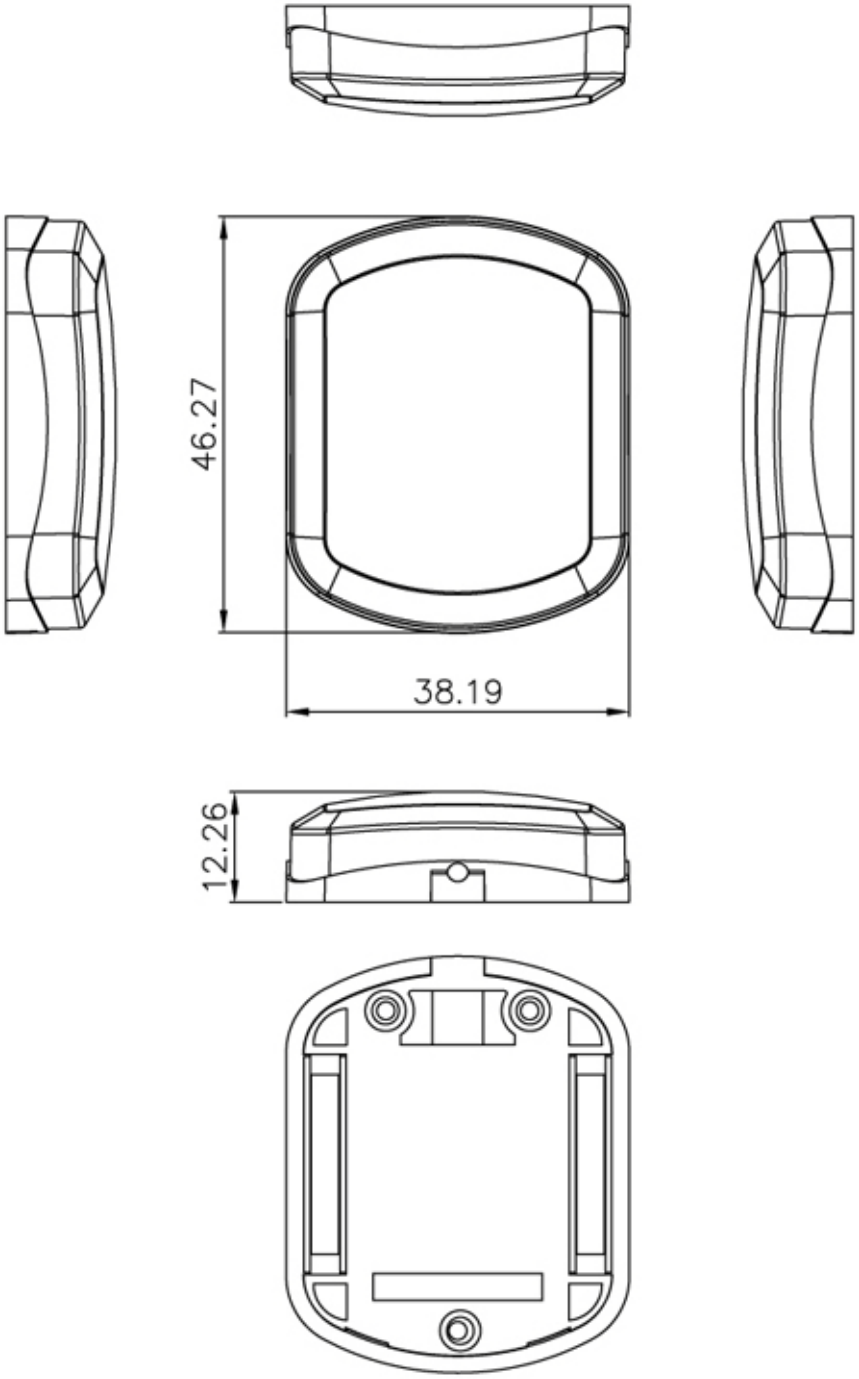
Mechanical Diagram:



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