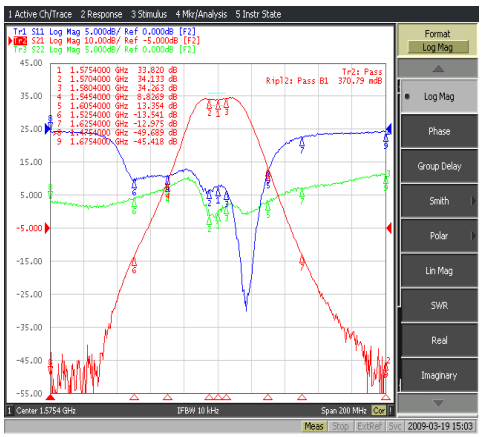
Wide Out-of-Band Rejection Anti-jamming Lightning proof GPS
TG-15AE-38-02

1. GPS antenna technical specification:

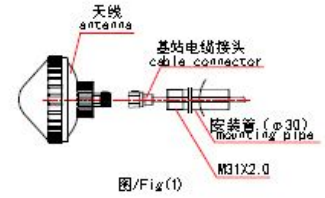


1. Frequency band：1575.42 ±5MHz
2. Gain：38 ±2dBi
3. Output VSWR：2.5 max
4. Polarization：Right Hand Circular Polarization
5. Half-power beam width (°)：110 ±10°
6. Axial ratio（dB）：< 5 max
7. Front-to-back ratio（dB）：>10 min
8. Output impedence：50Ω
9. DC supply voltage：DC 4V~6V
10. Current consumption：DC <45mA
11. Operating Temperature Range：-40 ~ +75ºC
12. Lighting Protection：8/20 us 5KA according to IEC61000-4-5 standard
13. MTBF：Mean Time Between Failures > 100000H
14. ESD imunity：IEC6100-4-2 class 3
15. Antenna connector：N type(Female)

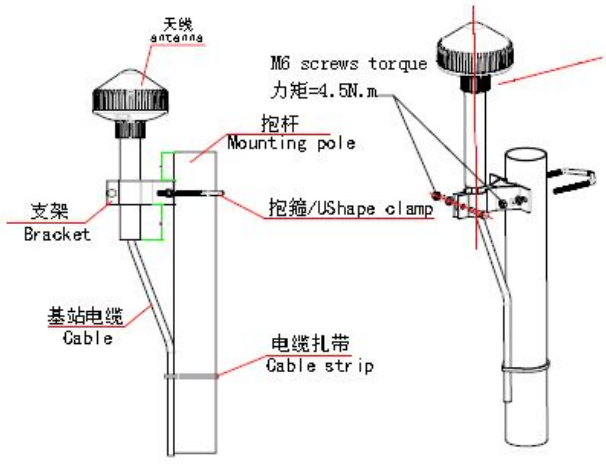
2. GPS antenna LNA technical specification

Note：GPS antenna LNA is the low noise amplifier PCB inside the antenna

1. Frequency band：　1575 ±5 MHz
2. Gain：　34 ±2 dB
3. Bandwidth Ripple:1575.42 ±1.023 MHz：　<1dB
   1575.42 ±5 MHz：　<2dB
4. Noise figure：1.8dB typ.　2.5dB max
5. LNA output 1dB compression point：> 0dBm
6. Out of band rejection：　f_0=1575.42 MHz
   f_0 ±30 MHz　12dB min
   f_0 ±50 MHz　35dB min
   f_0 ±100 MHz　70dB min
7. Jam rejection of large signal：at 100MHz off the bandwidth, input 0dBm single frequency signal, the gain degradation of GPS antenna LNA is less than 2dB, pass band gain, ripple is less than 2dB, GPS antenna can work normally.



图/Fig(1)



3. GPS passive antenna specification

1. Frequency band：1575.42 MHz
2. Polarization：Right Hand Circular Polarization
3. Centrol frequency：1575.42 MHz
4. Bandwidth：　≥10 MHz
5. VSWR：　≤1.5
6. Gain：　4.0 dBi
7. Impedence：　50Ω

4. Mechanical Specification

8. Radome material：　ASA
9. Dimensions：Φ100×107±2 mm　（not include mounting key）
10. Weight：0.4　±0. 1Kg
11. Working temperature(ºC)：-40 ~ +75
12. Anti-wind（Km/h）：140
13. Operation condition：Outdoor application

5. Attachments

5.1	Antenna	1pcs	5.5	U shape clamp	1pcs	5.9	Instruction　1pcs
5.2	Mounting pipe	1pcs	5.6	Nut M6	3pcs		
5.3	Bracket	1pcs	5.7	Washer	3pcs		
5.4	Bolt m6x30	1pcs	5.8	Spring washer	3pcs		

6. Accord RoHS

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