

Full Frequency Survey Antenna

Product introduction

PM352 is an high precision measuring antenna which can support full bands for GPS, BDS , GLONASS and Galileo.It can be widely used in surveying and mapping, marine surveying, geological monitoring, bridge deformation monitoring, automated harbor, reference station of UAV and unmanned vehicle.

Key Features

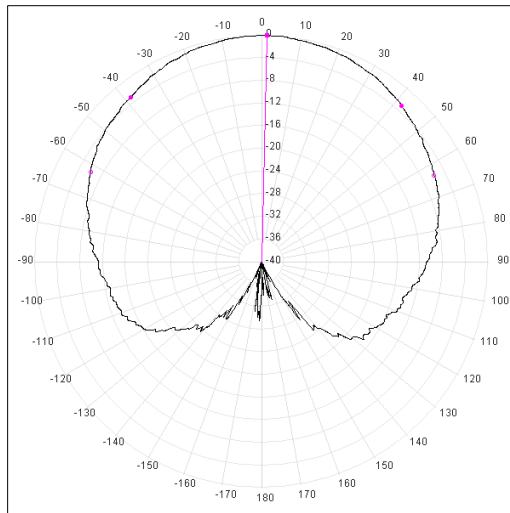
- 1、 Small Size, light weight, compact structure;
- 2、 Supports 4G, Wi-Fi, Bluetooth;
- 3、 Strong anti-interference ability to endure the harsh operating environments;
- 4、 Powerful system compatibility, easy for machine integration;
- 5、 Stable phase center guarantees the accuracy of positioning within millimeter level.

Technical parameters

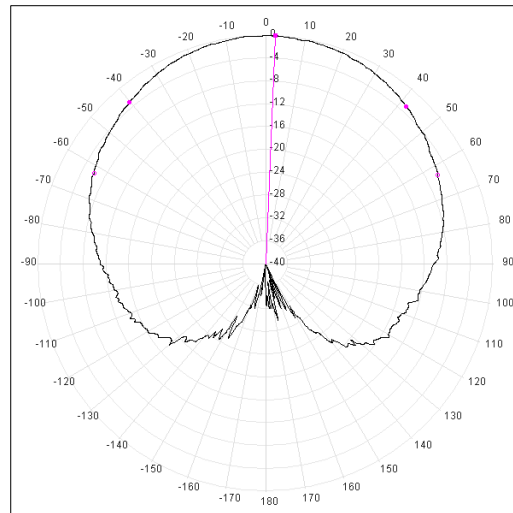
Passive antenna characteristics		Low Noise Amplifier Characteristics		Structural and environmental adaptability	
Frequency Range	BDS B1/B2/B3 GPS L1/L2/L5/L-Band G LONASS L1/L2/L3 GALILEO E1/E5a/E5b/E6 BT (2402MHz~2480MHz) WiFi (2412MHz~2472MHz)	LNA Gain	L2: 35 ± 2 dB L1: 35 ± 2 dB	Dimensions	$\Phi 159.7 \times 19.7$ mm
Antenna Impedance	50 Ω	Noise figure	≤ 2.0 dB	Weight	≤ 150 g
Polarization	RHCP	VSWR	≤ 2.0	Connector	GNSS: MCX-C-JW1.5 BT: IPEX-1
Antenna axis ratio	GNSS ≤ 3 dB	Passband ripple	± 2 dB	Mounting	4pcs screws
Horizontal coverage	0° ~360°	Operating voltage	DC3.3~12V	Operating TEMP	-40°C ~+85°C
VSWR	GNSS ≤ 1.5 2.412GHz~2.482GHz ≤ 2.5	Operating current	≤ 50 mA	Storage TEMP	-55°C ~+85°C
Maximum gain	GNSS ≥ 5.5 dBi BT ≥ 1 dBi			Storage humidity	95%noncondensing
Phase center error	± 2 mm				

GNSS Pattern &Gain

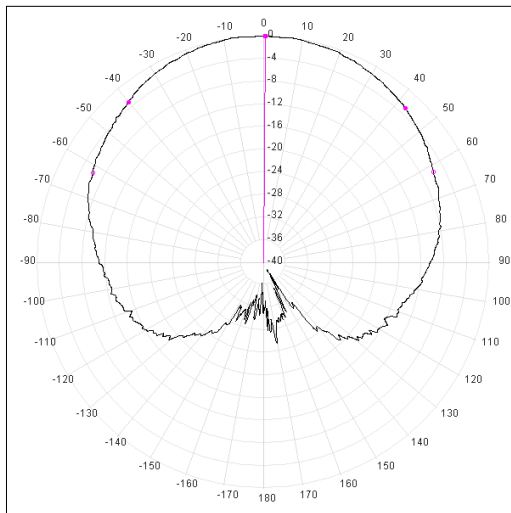
Frequency Range	Antenna gain (dBi)	Antenna axis ratio (dB)	FBR(dB)
1175. MHz	4.37	1.10	25.69
1205. MHz	5.46	0.63	24.03
1225. MHz	5.79	0.73	24.59
1268. MHz	4.83	0.52	26.03
1560. MHz	6.08	0.30	23.12
1575. MHz	6.03	0.64	23.38
1590. MHz	5.83	0.70	27.34
1610. MHz	5.70	0.85	26.35



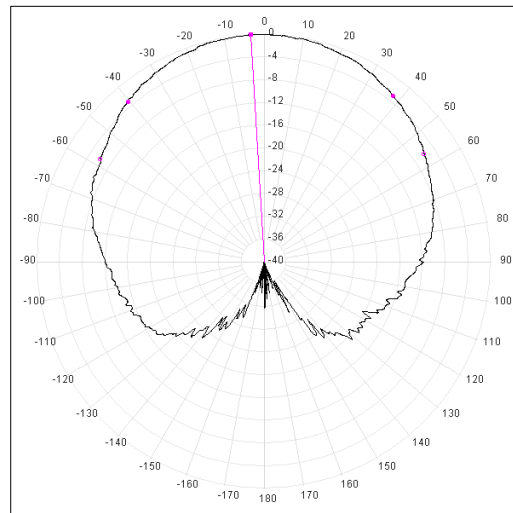
(Freq=1176MHz)



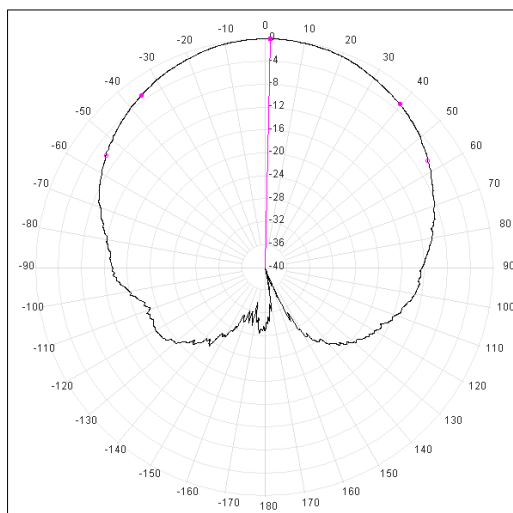
(Freq=1205MHz)



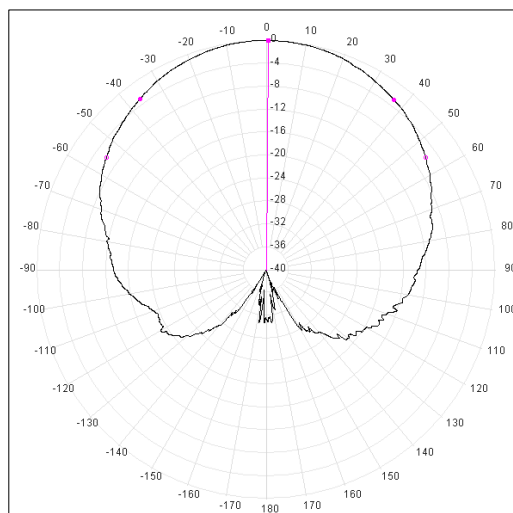
(Freq=1227MHz)



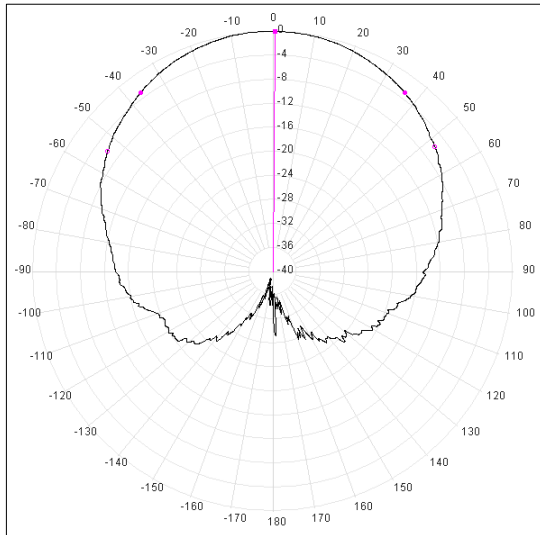
(Freq=1268MHz)



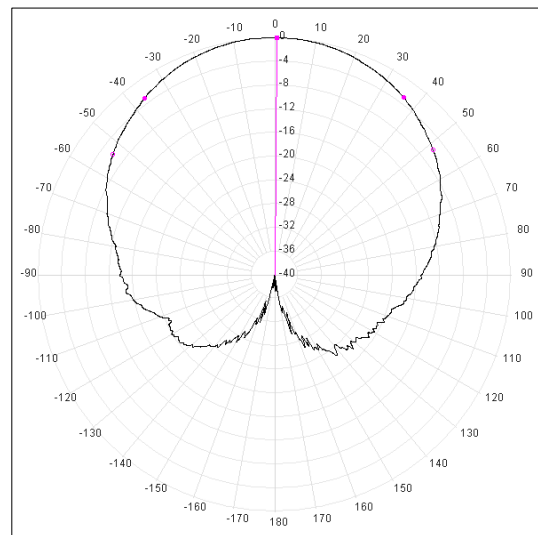
(Freq=1560MHz)



(Freq=1575MHz)

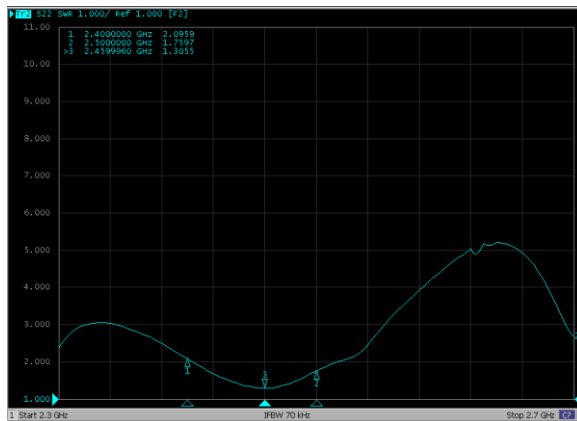


(Freq=1590MHz)



(Freq=1610MHz)

BT/WIFI---VSWR & Efficiency (%)

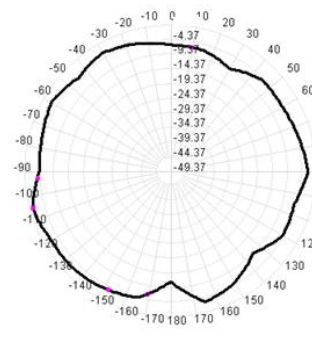


(2400MHz VSWR)

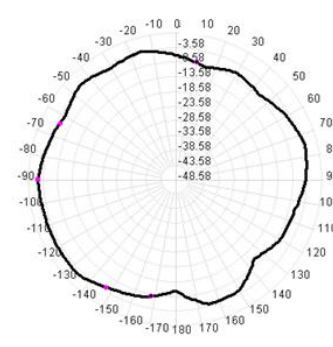
BT/WIFI---gain & Efficiency (%)

Frequency Range (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Maximum gain (dBi)	0.29	0.32	0.38	0.46	0.56	0.55	0.52	1	0.92	0.95	0.97
Efficiency (%)	49.2	45.3	45.5	46.7	45.5	47.4	47.1	48.5	46.2	45.9	44.1

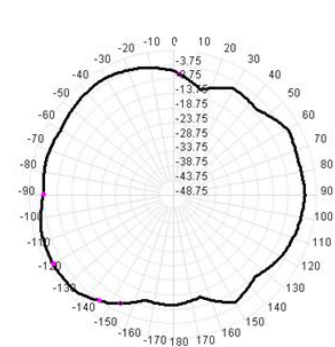
(BT/WIFI Efficiency (%))



2410MHz

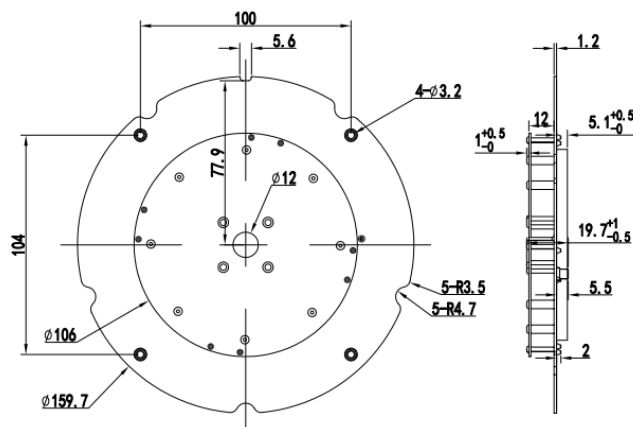


2450MHz



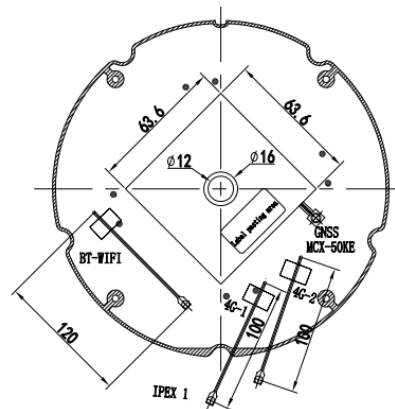
2480MHz

Structural characteristics (dimensional tolerances ± 0.3 mm not noted)



Top view

Side view



Bottom view