



弗迪科技
FinDreams Technology

WIFI BT Antenna

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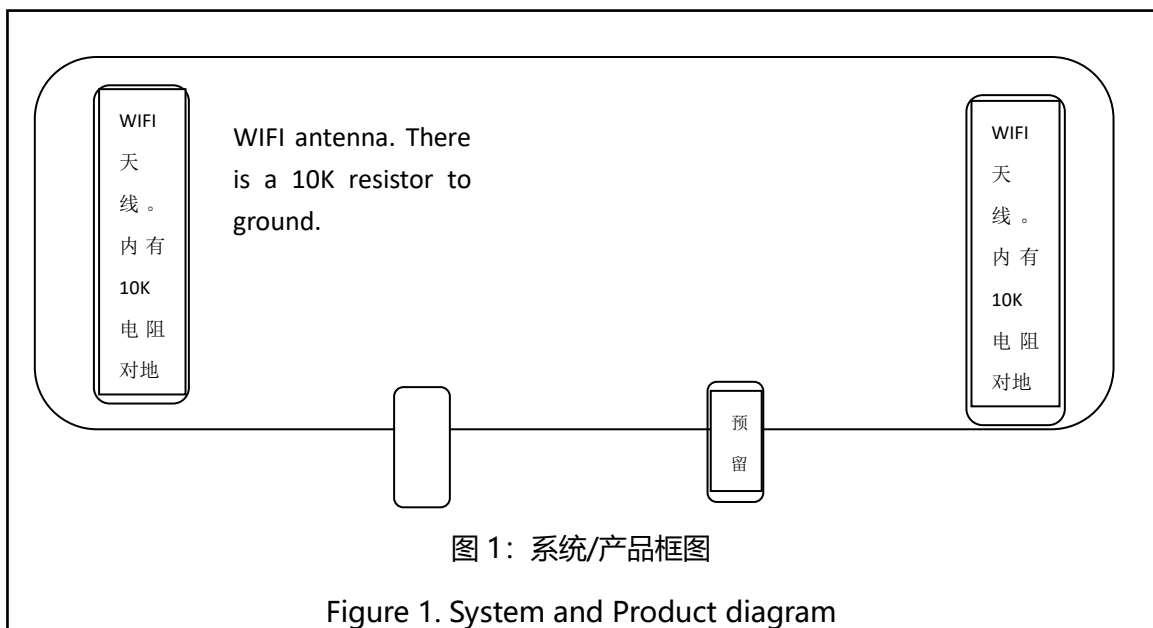
1 产品概述 General Description

1.1 概述 Application

该天线包含：WIFI/BT 天线*2

The antenna includes: WIFI/BT antenna*2

1.2 系统/产品框图 System and Product diagram



1.3 外形尺寸图 Mechanical Dimensions

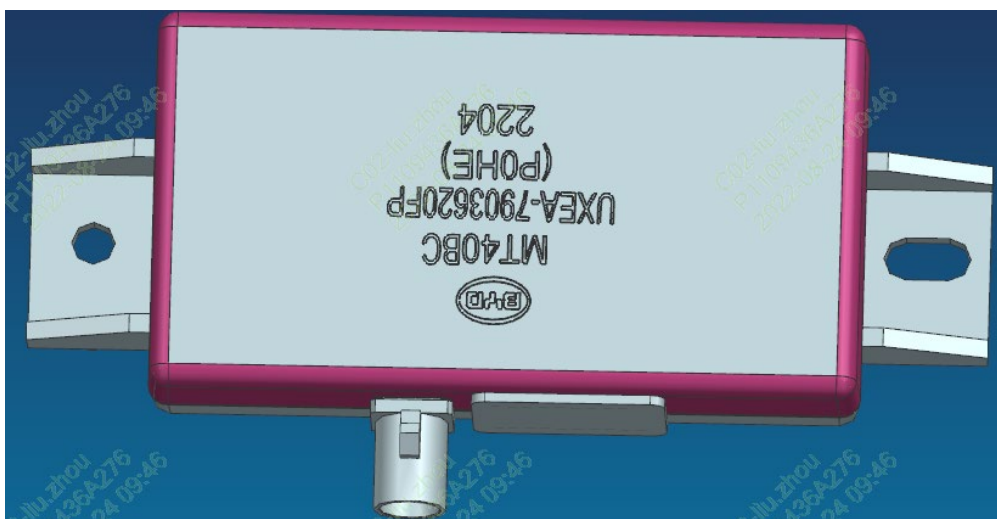


图 2：外形图
Figure 2. Mechanical Dimension

1.4 引脚定义 Pin Definition

NO.	Use Location	电器端 Electrical end					线束端 Harness end					
		Small line model	Sheath model	Terminal plating	supplier	Take over branch factory	Sheath model	supplier	Terminal model		supplier	appendix
1	WIFI Ant 1	/	35554949	Center pin gold-plated, shield tin-plated	Aptiv	The 15th Division	35127563	Aptiv	/	/	/	/

2 产品参数 Product Specification

2.1、驻波比 VSWR

频段	VSWR
2. 4GHz	≤2
5GHz	≤3
6GHz	≤3

2.2、WIFI/BT 效率 Efficiency

2400~2500MHz

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency (dBi)	-2. 86	-2. 61	-2. 43	-2. 11	-1. 97	-1. 99	-1. 71	-1. 40	-1. 48	-1. 76	-1. 77
Gain (dBi)	0. 97	1. 54	1. 86	2. 31	1. 84	1. 86	2. 28	2. 76	1. 84	1. 44	1. 80
Efficiency (%)	51. 77	54. 88	57. 19	61. 54	63. 57	63. 21	67. 50	72. 43	71. 08	66. 75	66. 56

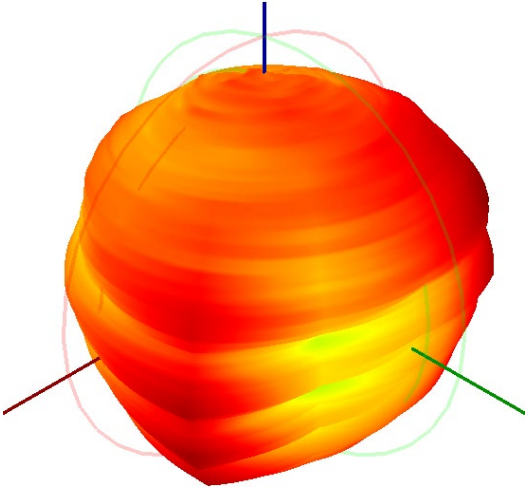
5

5150~5850MHz

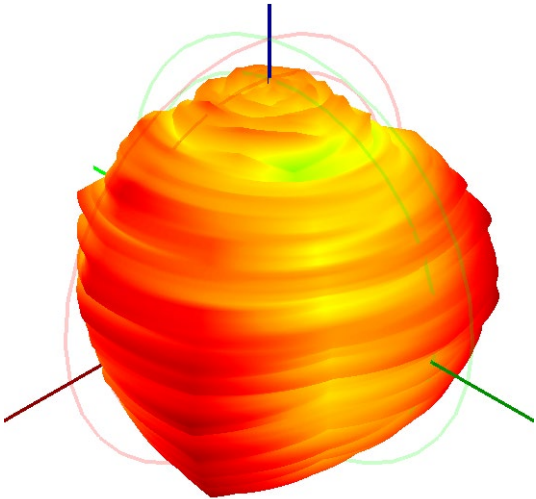
Frequency(MHz)	5140	5160	5180	5200	5220	5240	5260	5280	5300	5320	5340	5360.0	5380.0
Efficiency(dBi)	-3. 50	-3. 44	-4. 20	-3. 87	-5. 10	-2. 47	-3. 26	-2. 98	-3. 58	-3. 70	-3. 00	-4. 39	-3. 01
Gain (dBi)	1. 54	2. 08	0. 92	0. 31	-0. 39	1. 60	1. 72	2. 17	1. 02	0. 48	1. 24	0. 29	1. 41
Efficiency (%)	44. 68	45. 32	38. 00	41. 04	30. 88	56. 56	47. 25	50. 38	43. 83	42. 68	50. 10	36. 41	49. 96
Frequency(MHz)	5400	5420	5440	5460	5480	5500	5520	5540	5560	5580	5600	5620	5640
Efficiency(dBi)	-3. 49	-2. 81	-1. 80	-2. 63	-3. 29	-4. 87	-3. 51	-3. 57	-4. 33	-2. 48	-3. 68	-2. 70	-1. 57
Gain (dBi)	0. 88	2. 18	2. 92	2. 20	0. 93	-0. 08	0. 63	1. 06	0. 01	1. 34	0. 11	1. 55	2. 49
Efficiency (%)	44. 81	52. 31	66. 00	54. 63	46. 89	32. 55	44. 61	43. 91	36. 94	56. 51	42. 83	53. 70	69. 66
Frequency(MHz)	5680	5700	5720	5740	5760	5780	5800	5820	5840	5860			

WIFI BT Antenna Product Specification

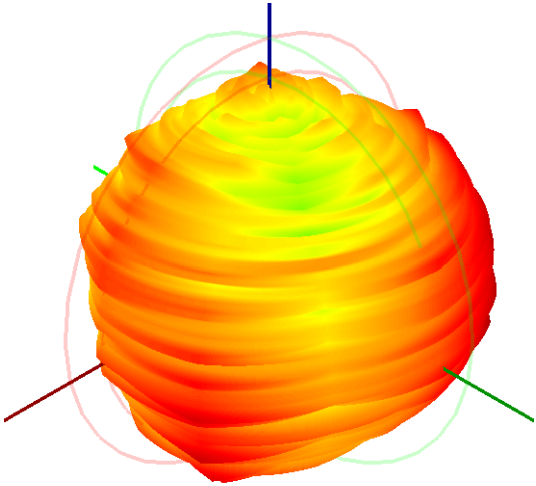
Efficiency(dBi)	-2.26	-3.24	-1.19	-2.08	-2.47	-2.36	-3.07	-1.79	-2.82	-2.44		
Gain (dBi)	1.99	1.51	3.65	2.75	2.05	2.79	1.00	1.82	0.82	2.45		
Efficiency (%)	59.40	47.44	76.02	62.00	56.66	58.03	49.32	66.25	52.20	57.06		



2440.0MHz H+V, Eff: 63.6%



5160.0MHz H+V, Eff: 45.3%



3 可靠性 Reliability

表 9：可靠性规格 Table 9.Reliability Specification		
项目 Items	规格 Specification	备注 Remarks
工作温度 operation temperature	-40°C ~ 85°C	
存储温度 storage temperature	-40°C ~ 90°C	
高温耐久 High Temperature operation	85°C 600h	
低温工作 Low Temperature operation	-40°C 48h(低温保存 24h, 启动工作 24h)	
恒定湿热 Constant Thermal and Humidity	85°C, 85%, 280h	
冷热冲击 Thermal Shock	85°C, -40°C, 温度保持 30min, 170 个循环 85°C, -40°C, 30min, 170 cycles	
振动 vibration	加速度有效值: 27.4m/s ²	
机械冲击 Mechanical Shock	冲击形式: 半正弦, 峰值加速度: 2 5 g , 脉冲时间 10ms, 冲击次数: X、Y、Z 三个轴 向的每个方向各 400 次, 总共 2400 次。	
ESD	接触放电 Contact discharge ±6kV 空气放电 Air discharge ±15kV	

4 安装推荐 Installation recommendation

1. 与天线的转接延长线束需使用低损耗 50 欧姆同轴线, 推荐线材型号: 莱尼 dacar 302-3.、
1. The antenna extension cable must use low-loss 50-ohm coaxial cable. The recommended cable type is LEONI dacar 302-3.

2. 天线安装与塑料面板上方，天线上方不允许有金属遮挡。如果天线安装在金属面板上方，天线下方的金属面板需要挖空或者把天线的安装点垫高 15mm，保证天线的效率。

2. The antenna should be mounted above a plastic panel. No metal obstructions are allowed above the antenna. If the antenna is mounted above a metal panel, the metal panel below the antenna should be hollowed out or the antenna mounting point should be raised by 15mm to ensure antenna efficiency.