Applicable to A60 project BWG antenna solution

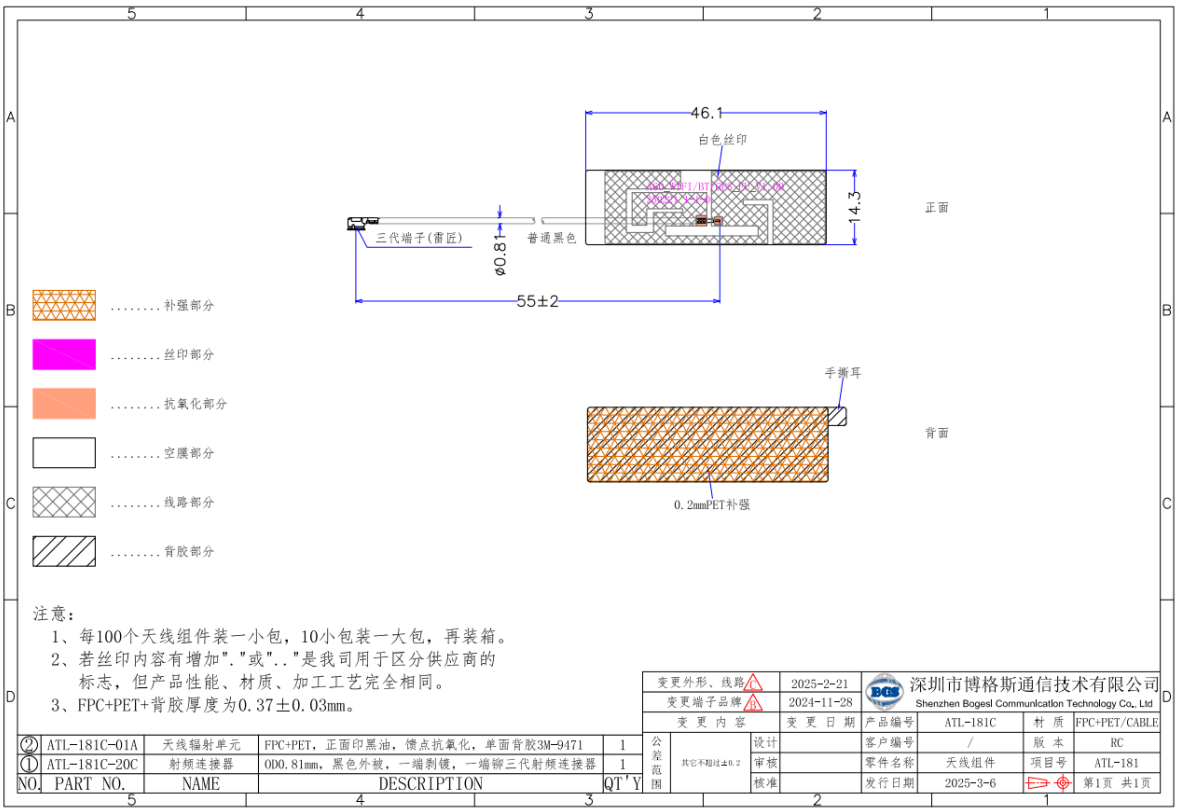
Electrical Specifications:

Frequency Band	GPS:1575MHz, BD:1602MHz WiFi: 2.4/5.8G	The Antenna Material	FPC+CABLE
Nominal Impedance	50Ω	Antenna Connection Mode	Ipex3
VSWR	≤6.0	Working Temperature	-40℃～+85℃
Peak Gain	1575MHz: -2.57dBi 1602MHz: -4.3dBi	Keep The Temperature	+19℃～+23℃
	2400-2500MHz: 4.04dBi 5100-5800MHz: 3.94dBi	Polarization	Linear Polarization

Test Conditions And Methods:

Test Instruments	Test Method	Test Result
7*4*3 microwave darkroom E5071B network analyzer	1. Assemble the antenna to be tested on the prototype. 2. Put the prototype on the test fixture in a dark room, and conduct comprehensive test with it.Instrument/analyzer connection is established. 3. Test antenna passive data with test software.	Refer to the Test Report

Product drawings



注意：

1、每100个天线组件装一小包，10小包装一大包，再装箱。

2、若丝印内容有增加"."或".."是我司用于区分供应商的标志，但产品性能、材质、加工工艺完全相同。

3、FPC+PET+背胶厚度为0.37±0.03mm。

变更外形、线路	2025-2-21
变更端子品牌	2024-11-28
变更内容	变更日期

深圳市博格斯通信技术有限公司
Shenzhen Bogesi Communication Technology Co., Ltd

NO.	PART NO.	NAME	DESCRIPTION	QT'Y
②	ATL-181C-01A	天线辐射单元	FPC+PET，正面印黑油，馈点抗氧化，单面背胶3M-9471	1
①	ATL-181C-20C	射频连接器	OD0.81mm，黑色外被，一端剥镀，一端铆三代射频连接器	1

公差范围：其它不超过±0.2

设计		产品编号	ATL-181C	材质	FPC+PET/CABLE
审核		客户编号	/	版本	RC
核准		零件名称	天线组件	项目号	ATL-181
		发行日期	2025-3-6		第1页 共1页

Passive performance test parameters

Frequency(MHz)	824	1710	2690
VSWR	3.50	2.16	1.35

Pactive test data

Freq (MHz)	Effi (%)	Gain (dBi)
1558	23.23	-1.28
1559	23.05	-1.33
1560	23.38	-1.49
1561	23.37	-1.74
1562	22.32	-1.98
1563	21.48	-2.2
1564	20.98	-2.32
1565	20.84	-2.35
1570	23.7	-1.63
1571	23.81	-1.63
1572	23.38	-1.75
1573	23.5	-1.98
1574	22.41	-2.27
1575	22.36	-2.57
1576	21.54	-2.82
1577	21.05	-2.98
1578	20.88	-3
1579	21.06	-2.95
1580	21.52	-2.81
1598	20.72	-3.41
1599	19.86	-3.7
1600	19.12	-3.97
1601	18.59	-4.19
1602	18.35	-4.3
1603	18.4	-4.31
1604	18.73	-4.23
1605	19.22	-4.08

Freq (MHz)	Effi (%)	Gain (dBi)
2400	41.42	3.41
2410	44.17	3.89
2420	44.61	3.87
2430	47.12	4.04
2440	46.16	4
2450	45.24	3.98
2460	43.11	3.79
2470	42.53	3.68
2480	45.54	3.81
2490	45.65	3.7
2500	42.65	3.34

Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
5100	43.52	3.68	5520	52.85	3.14
5120	43.25	3.49	5540	51.62	3.24
5140	42.63	3.06	5560	50.75	3.43
5160	42.87	2.68	5580	50.11	3.52
5180	43.01	2.25	5600	52.79	3.94
5200	45.41	1.91	5620	49.72	3.6
5220	45.95	1.33	5640	52.77	3.65
5240	47.76	1.49	5660	55.87	3.73
5260	45.7	1.53	5680	50.4	2.95
5280	44.87	1.61	5700	49.21	2.5
5300	43.36	1.58	5720	48.15	2.05
5320	44.3	1.81	5740	43.79	1.46
5340	45.66	2.12	5760	44.47	1.54
5360	47.93	2.43	5780	45.97	1.73
5380	48.93	2.48	5800	40.56	1.33
5400	49.13	2.51	5820	40.54	1.59
5420	50.38	2.66	5840	39.29	1.67
5440	45.04	2.14	5860	36.31	0.67
5460	47.99	2.48	5880	37.55	0.91
5480	51.1	2.8	5900	35.92	0.63
5500	47.7	2.55			

Directional diagram