

1、 Main Antenna

- Technical Parameters

Antenna model: 2G/3G/4G

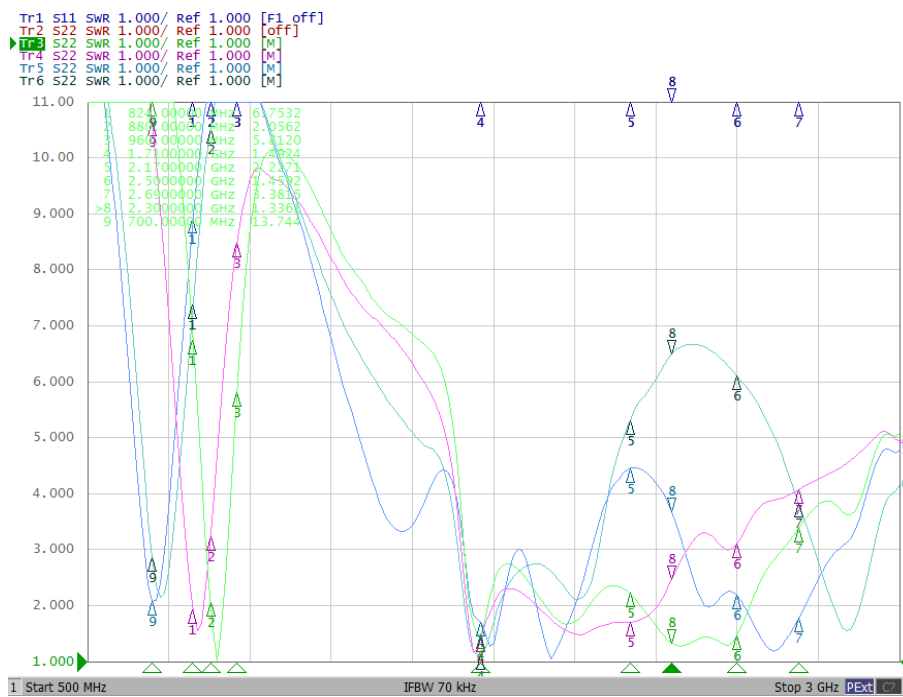
Manufacturer: Shenzhen bogesl communication technology co.,ltd

Antenna type: PIFA

Frequency Range: 700MHz~2690MHz

Voltage standing wave ratio: $\leq 6.7: 1$

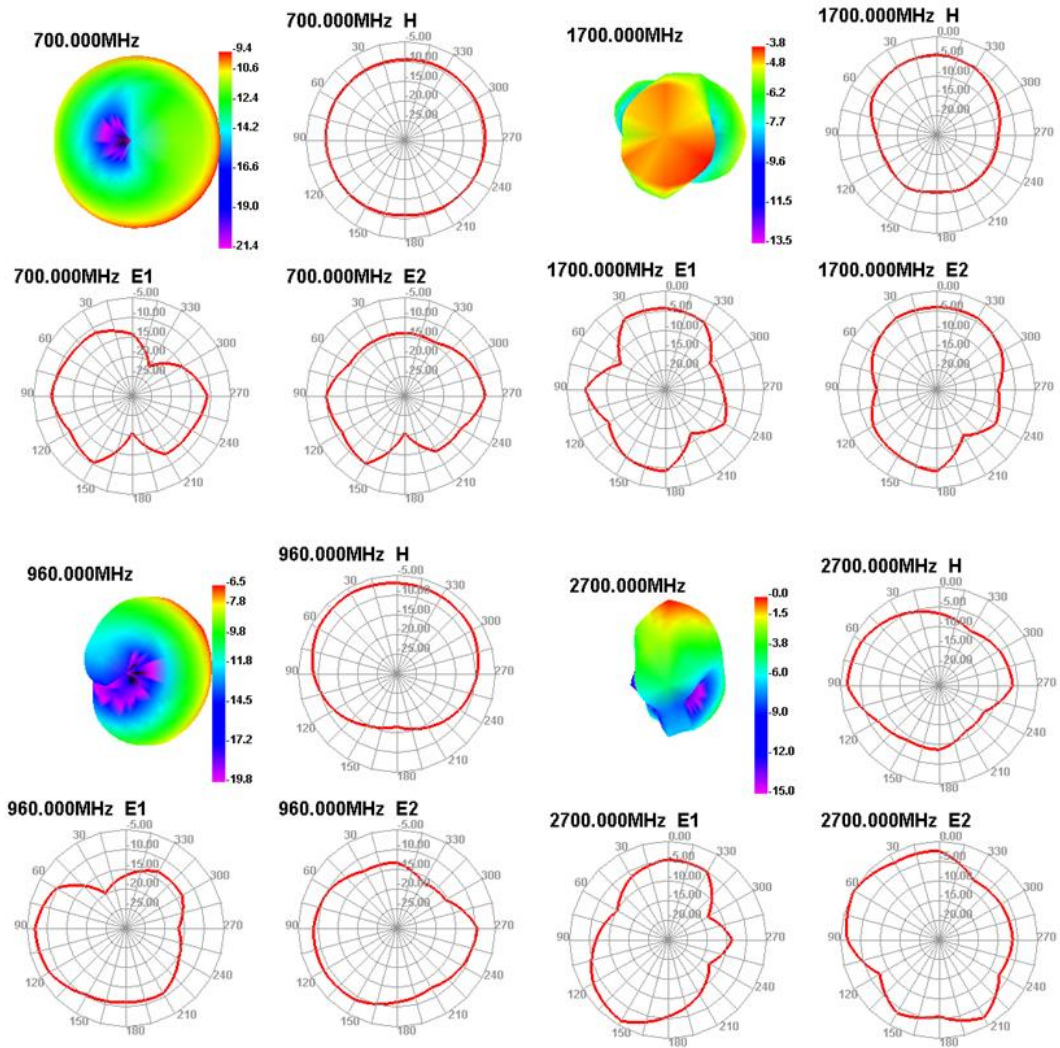
- S11



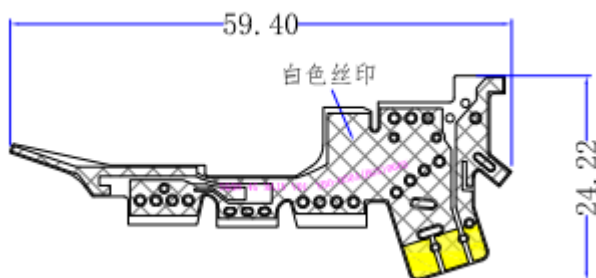
● Antenna efficiency and Gain:

Freq	Effi	Gain	Freq	Effi	Gain	Freq	Effi	Gain
(MHz)	(%)	(dBi)	(MHz)	(%)	(dBi)	(MHz)	(%)	(dBi)
700	14.6	-9.36	1700	27.98	-3.79	2300	39.11	2.29
710	15.46	-8.96	1720	29.46	-1.97	2320	37.94	2.41
720	16.79	-8.29	1740	35.49	-1.62	2340	36.08	2.33
730	18.58	-7.36	1760	37.55	-1.25	2360	38.71	2.27
740	19.73	-6.79	1780	39.64	-0.95	2380	40.52	1.9
750	20.49	-6.48	1800	36.56	-1.25	2400	41.74	1.92
760	19.06	-7	1820	36.71	-0.96	2500	32.61	0.03
770	19.78	-6.74	1840	37.22	-0.67	2520	37.31	1.25
780	18.03	-7.51	1860	35.08	-0.79	2540	42.78	2.12
790	19.21	-7.14	1880	33.44	-0.75	2560	44.28	1.95
800	19.8	-6.86	1900	33.92	-0.42	2580	47.41	1.92
810	26.43	-4.85	1920	31.49	0.15	2600	44.91	1.79
820	25.39	-4.93	1940	34.27	0.98	2620	40.79	1.55
830	25.94	-4.57	1960	35.39	1.46	2640	41.74	1.6
840	25.4	-4.36	1980	35.55	1.62	2660	39.46	1.22
850	25.54	-4.12	2000	32.54	1.39	2680	32.61	0.37
860	25.44	-3.99	2020	31.24	1.18	2700	30.78	-0.04
870	22.82	-4.66	2040	27.18	0.38			
880	20.81	-5.19	2060	28.76	0.67			
890	20.56	-5.34	2080	28.08	0.32			
900	21.42	-4.85	2100	29.66	0.28			
910	20.64	-4.93	2120	31.3	0.53			
920	21.33	-4.61	2140	30.22	0.65			
930	20.65	-4.73	2160	27.98	0.34			
940	20.14	-4.83	2180	28.31	0.36			
950	18.53	-5.53						
960	16.62	-6.51						

- Direction map



- Structure size:



2、DIV Antenna

- Technical Parameters

Antenna model: 2G/3G/4G

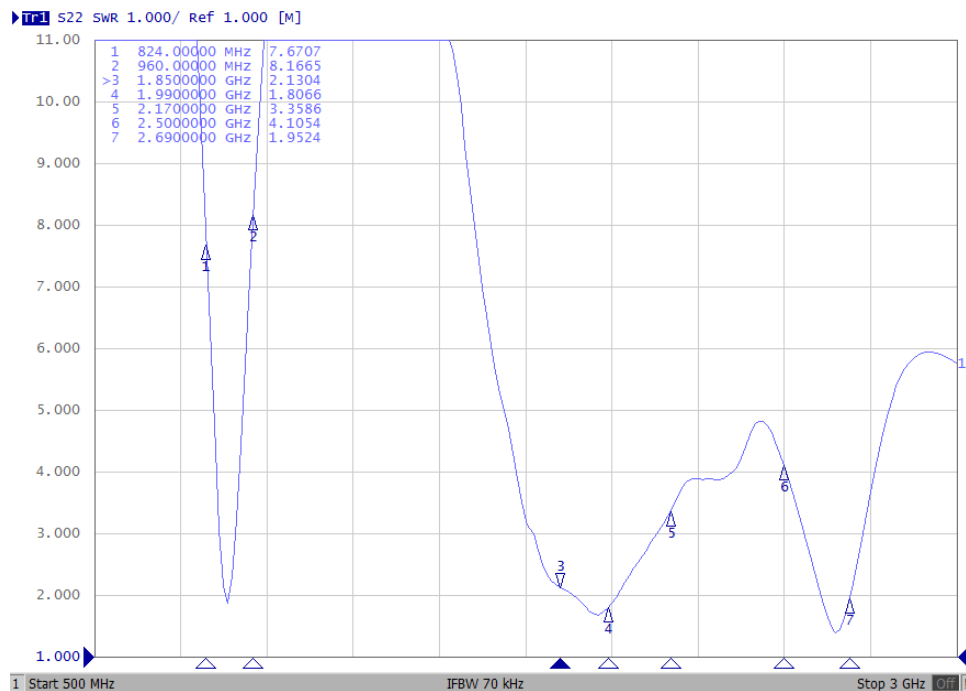
Manufacturer: Shenzhen bogesl communication technology co.,ltd

Antenna type: PIFA

Frequency Range: 700MHz~2690MHz

Voltage standing wave ratio: $\leq 8.1: 1$

- S11

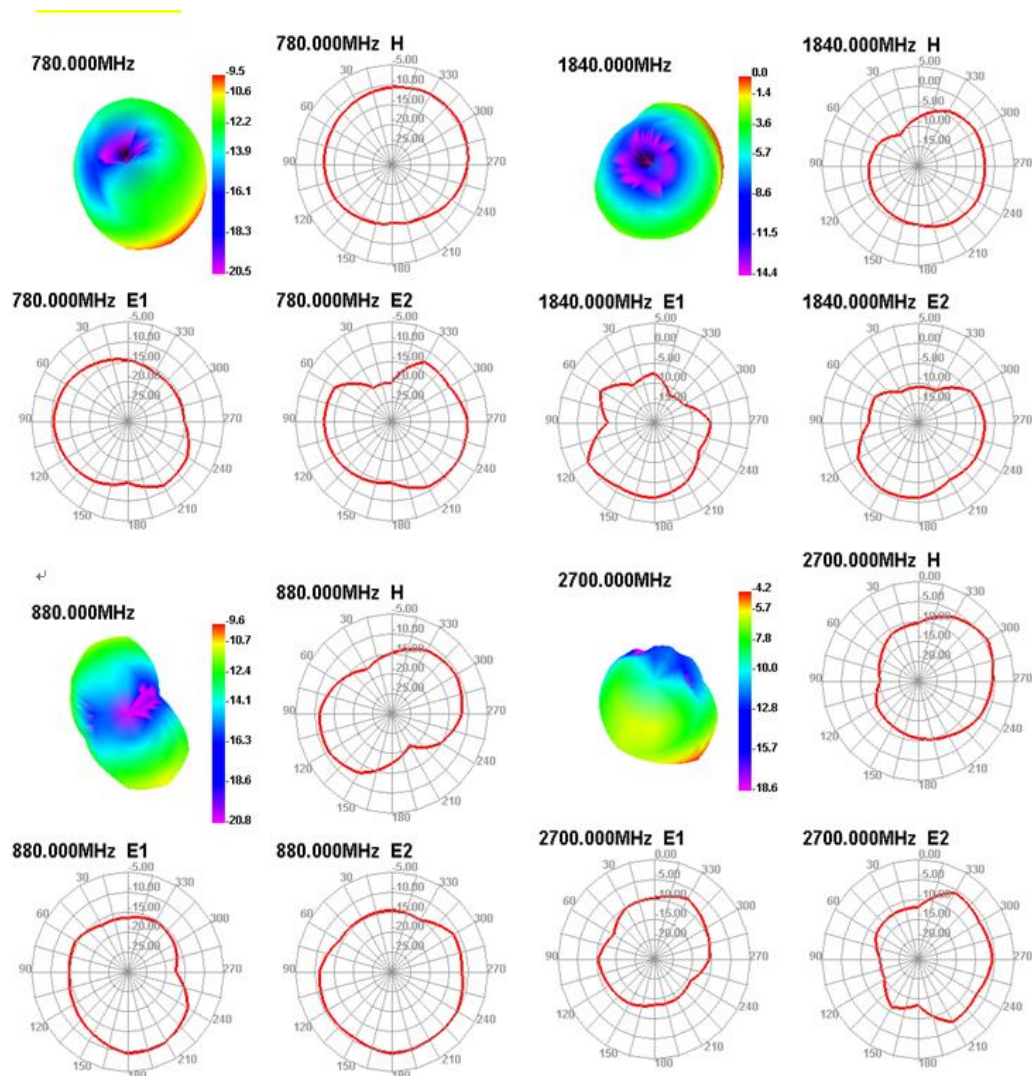


- Antenna efficiency and Gain

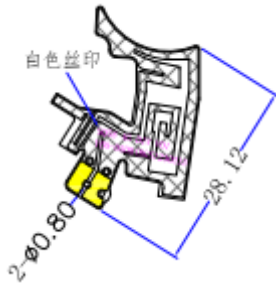
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
780	5.71	-9.47	1840	37.22	0.03	2180	22.62	-5.1
790	7.59	-8.2	1860	41.76	0.72	2300	21.83	-5.31
800	9.41	-7.25	1880	41.94	0.69	2320	21.62	-4.82
810	12.8	-5.86	1900	44.76	0.72	2340	20.74	-6.08
820	11.83	-6.2	1920	42.82	0.47	2360	21.07	-7.03

830	11.78	-6.31	1940	41.91	0.24	2380	20.4	-7.01
840	9.14	-7.63	1960	36.13	-0.47	2400	22.16	-7.88
850	6.38	-9.5	1980	34.75	-0.9	2500	24.41	-6.47
860	5.7	-9.87	2000	33.04	-0.81	2520	30.87	-2.93
870	4.95	-10.14	2020	31.84	-0.89	2540	32.21	-0.6
880	5.3	-9.55	2040	29.02	-1.2	2560	33.41	0.65
			2060	30.49	-0.71	2580	38.69	1.31
			2080	31.47	-1.14	2600	33.54	0.52
			2100	29.97	-1.33	2620	34.24	-1.02
			2120	28.04	-1.89	2640	32.63	-2.01
			2140	27.31	-2.71	2660	30.24	-3.4
			2160	24.36	-3.92	2680	33.55	-4.05
						2700	34.3	-4.22

● Directional map



- Structure size



3、GPS&WIFI&BT Antenna

- Technical Parameters

Antenna model: GPS&WIFI&BT

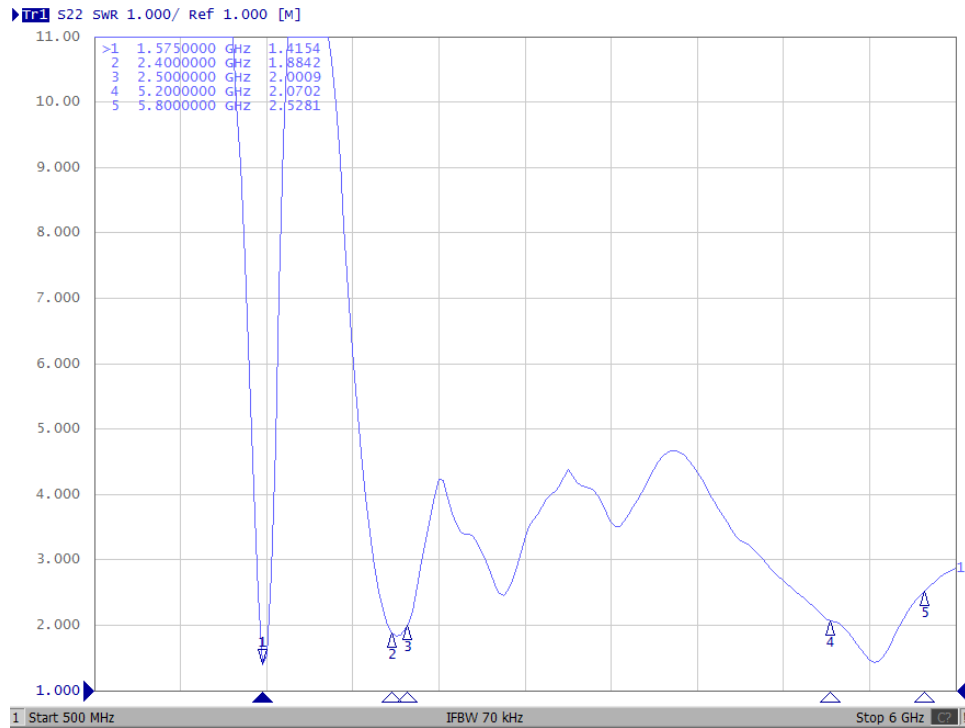
Manufacturer: Shenzhen bogesl communication technology co.,ltd

Antenna type: PIFA

Frequency Range : 1575MHz , 2400MHz~2500MHz ,
5150MHz~5850MHz

Voltage standing wave ratio: $\leq 2.52: 1$

- S11

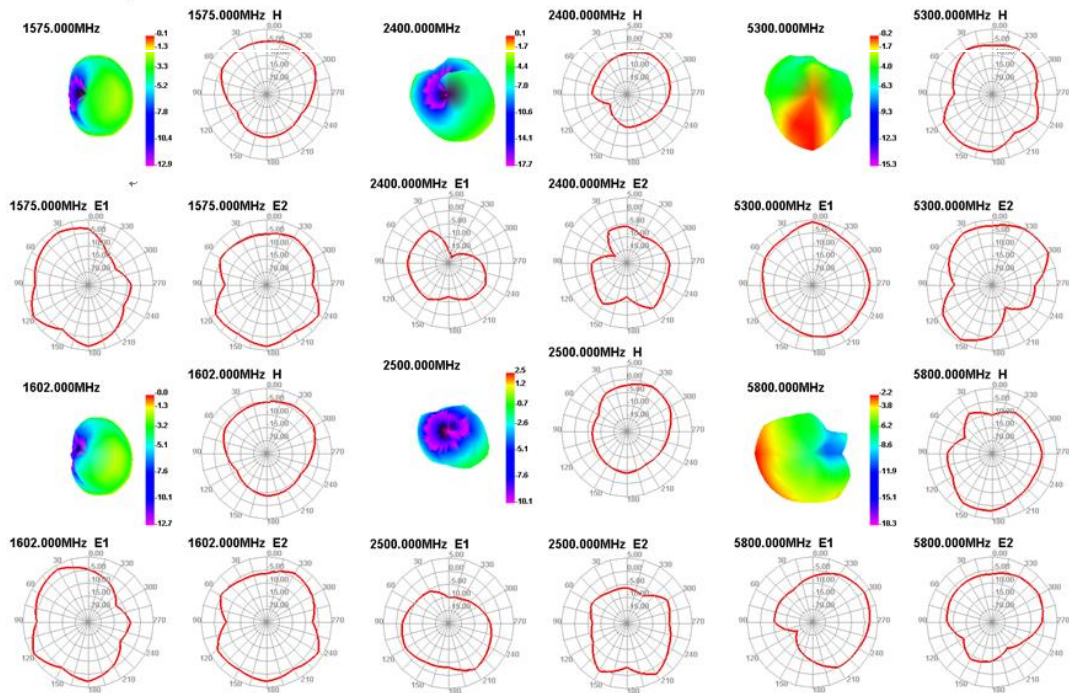


● Antenna efficiency and Gain

Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
1575	34.09	-0.06	5100	53.45	1.19	5560	38.63	0.37
1576	33.65	-0.12	5120	52.77	1.14	5580	38.62	0.61
1577	33.18	-0.17	5140	49.66	1	5600	36.08	0.14
1578	32.81	-0.22	5160	49.56	1.29	5620	34.79	0.22
1579	32.54	-0.25	5180	45.4	1.28	5640	32.98	0.38
1580	32.45	-0.26	5200	44.57	1.16	5660	39.44	1.12
1600	31.77	-0.18	5220	46.18	0.85	5680	44.43	1.21
1601	32.09	-0.11	5240	44.6	0.63	5700	41.41	0.9
1602	32.57	-0.02	5260	42.5	0.09	5720	37.79	-0.11
1603	33.12	0.05	5280	46.45	0.13	5740	36.51	-1.1
1604	33.72	0.15	5300	46.72	-0.24	5760	33.79	-1.68
1605	34.16	0.23	5320	48.78	0.45	5780	32.89	-2.34
2400	34.32	0.07	5340	49.55	0.85	5800	31.79	-2.18
2410	38.75	0.55	5360	45.88	1.2			
2420	42.34	0.52	5380	48.6	1.94			
2430	38.08	0.41	5400	51.62	2.35			
2440	41.35	0.88	5420	50.96	2.16			
2450	43.86	1.27	5440	51.64	2.56			

2460	44.93	1.84	5460	47.35	2.15
2470	46.56	1.92	5480	48.3	1.49
2480	43.59	2.44	5500	46.36	0.89
2490	40.02	1.87	5520	44.95	0.73
2500	37.78	2.48	5540	39.54	0.16

● Direction map



● Structure size

