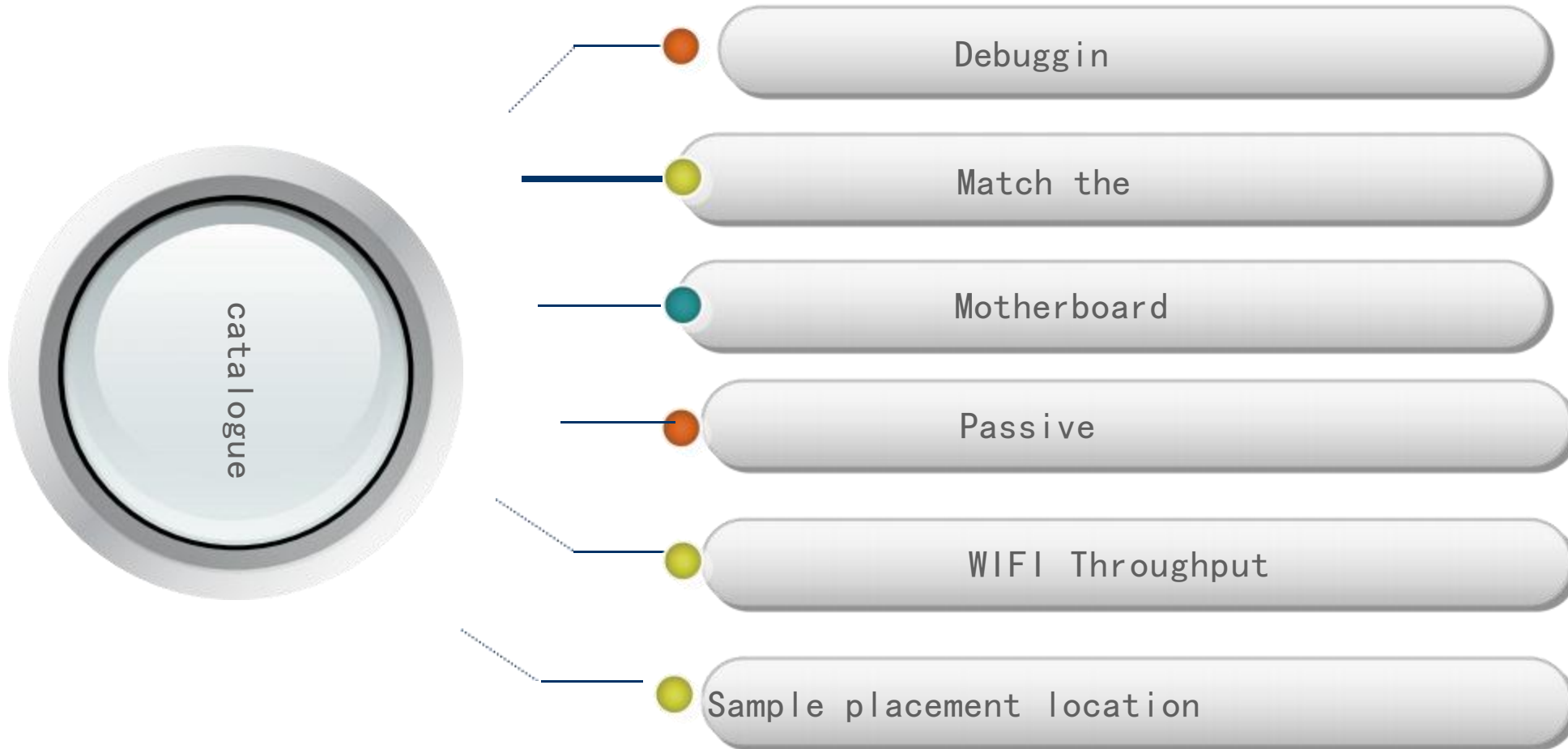
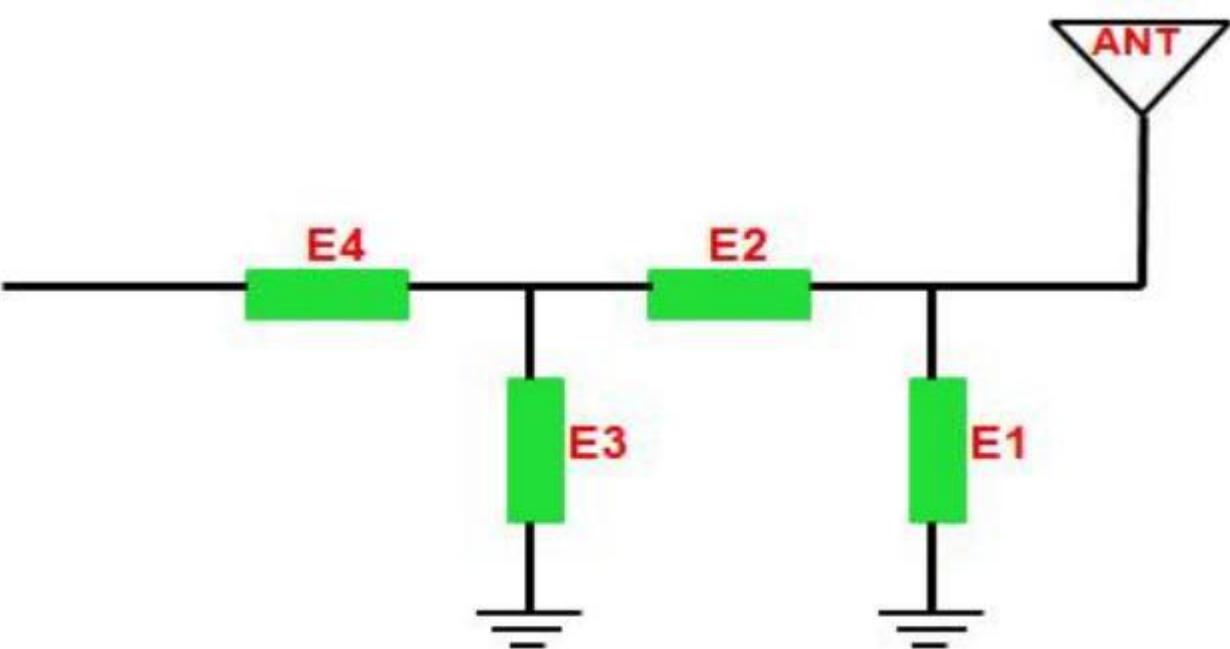


Dongguan Sinbolin Electronic Technology Co.,LTD

catalogue





The test antenna

Main Antenna		GPS Antenna	
Element	V alue	Element	V alue
E 1 (0402)		E 1 (0402)	
E 2 (0402)		E 2 (0402)	
E 3 (0402)		E 3 (0402)	
E 4 (0402)			
WIFI Antenn a		AUX Antenna	
Element	V alue	Element	V alue
E 1 (0402)		E 1 (0402)	
E 2 (0402)		E 2 (0402)	
E 3 (0402)		E 3 (0402)	

WIFI	CH	CK TRP(11M)	CK TIS(11M)
802.11b	1	16.2	-87
	6	15.8	-88
	13	16.5	-87

WIFI	CH	OFDM TRP (54M)	OFDM TIS (54M)
802.11g	1	15.3	-75
	6	15.5	-75
	13	15.5	-74

WIFI	CH	TRP(MSC7)	TIS (MSC7)
802.11n	1	14.8	-73
	6	14.6	-72
	13	14.6	-73

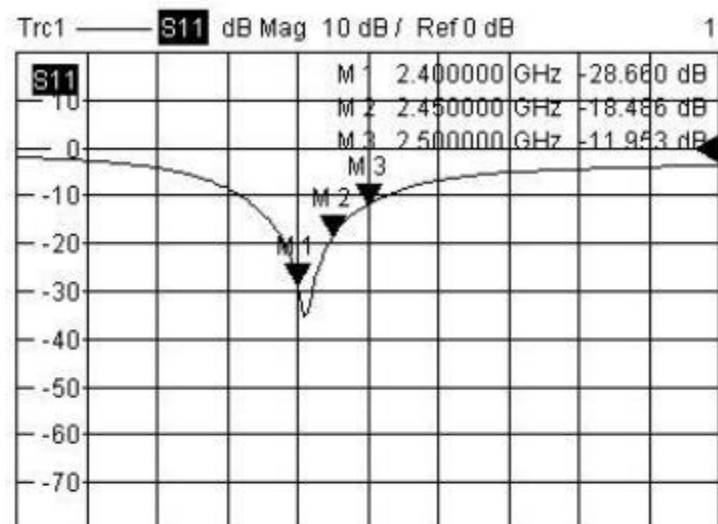
W IFI	C H	C CK TRP(11M)	C CK TIS(11M)
802.11b	1	13.8	-80.7
	6	14.0	-79.8
	13	13.4	-81.3

W IFI	C H	O FDM TRP (54M)	O FDM TIS (54M)
802.11g	1	13.1	-70.1
	6	13.7	-69.7
	13	12.9	-71.0

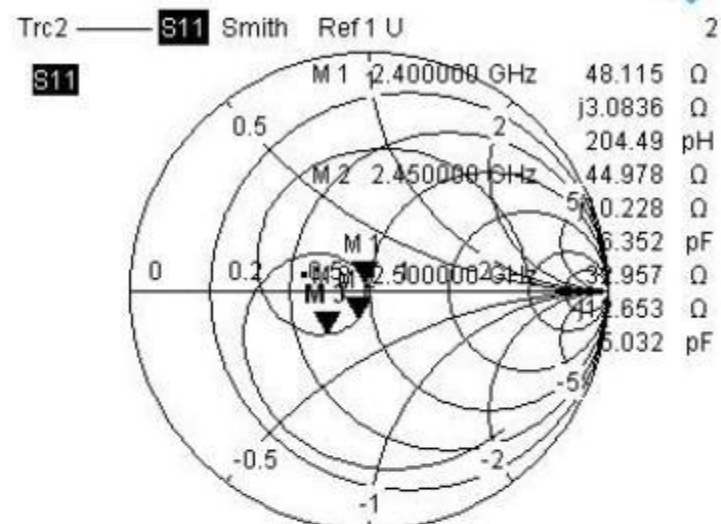
W IFI	C H	TRP(MSC7)	TIS (MSC7)
802.11n	1	12.7	-68.3
	6	12.3	-70.3
	13	12.2	-69.4

Radiation Patterns (2400-2500MHz)

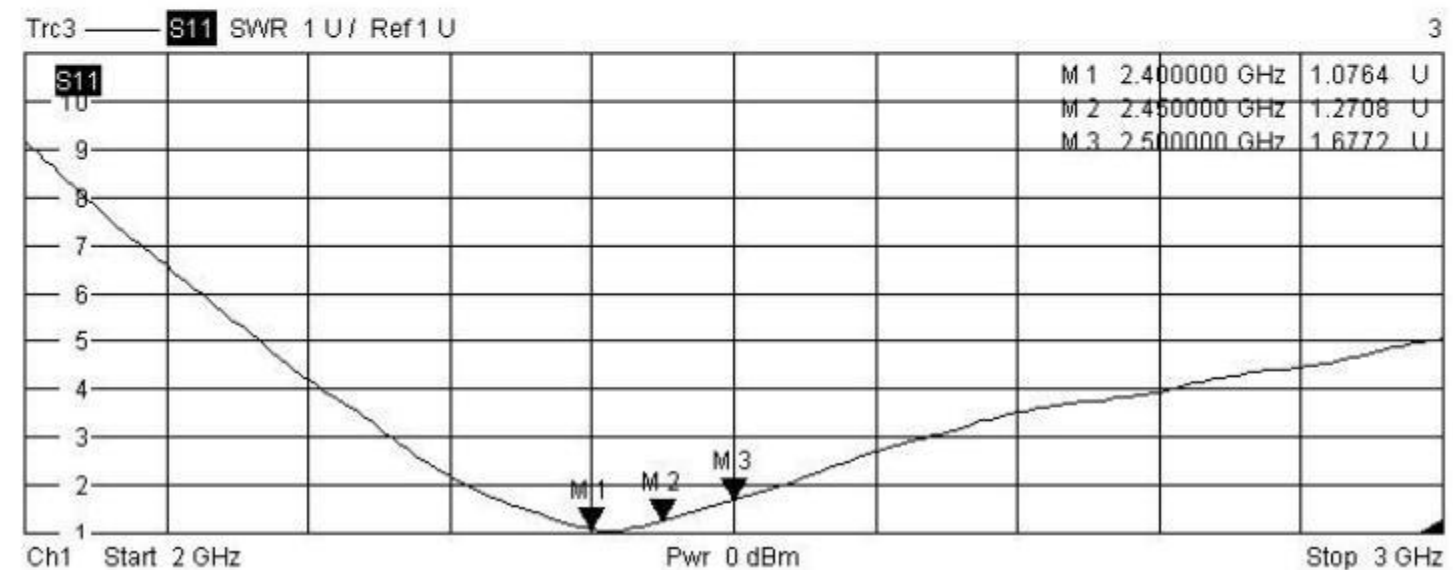
Passive Test For WIFI 2400		
Fre q (MHz)	E ffi (%)	G ain (dBi)
2400	61.02	2.0
2410	62.05	1.73
2420	62.82	1.82
2430	61.53	1.4
2440	59.85	1.34
2450	58.28	1.73
2460	55.51	1.69
2470	53.63	1.52
2480	55.3	1.71
2490	57.16	1.93
2500	56.88	1.91



Ch1 Start 2 GHz Pwr 0 dBm Stop 3 GHz



Ch1 Start 2 GHz Pwr 0 dBm Stop 3 GHz



Ch1 Start 2 GHz Pwr 0 dBm Stop 3 GHz

WIFI is > 22 dBm from the router

Upload data

```
C:\Windows\system32\cmd.exe - D:\iperf局域网测性能工具3.0.11\iperf-3.0.11-win64\iperf.exe -s
-----
Server listening on 5201
-----
Accepted connection from 192.168.1.4, port 59392
[ 5] local 192.168.1.3 port 5201 connected to 192.168.1.4 port 59394
[ ID] Interval      Transfer    Bandwidth
[ 5] 0.00-1.01    sec  4.57 MBytes 33.1 Mbits/sec
[ 5] 1.01-2.02    sec  3.41 MBytes 28.4 Mbits/sec
[ 5] 2.02-3.00    sec  3.35 MBytes 28.5 Mbits/sec
[ 5] 3.00-4.01    sec  4.00 MBytes 33.1 Mbits/sec
[ 5] 4.01-5.01    sec  3.21 MBytes 27.1 Mbits/sec
[ 5] 5.01-6.00    sec  3.65 MBytes 30.8 Mbits/sec
[ 5] 6.00-7.00    sec  4.59 MBytes 32.5 Mbits/sec
[ 5] 7.00-8.01    sec  4.54 MBytes 37.7 Mbits/sec
[ 5] 8.01-9.00    sec  4.54 MBytes 32.3 Mbits/sec
[ 5] 9.00-10.00   sec  4.42 MBytes 37.2 Mbits/sec
[ 5] 10.00-10.06  sec   231 KBytes 33.6 Mbits/sec
-----
[ ID] Interval      Transfer    Bandwidth
[ 5] 0.00-10.06   sec  40.5 MBytes 33.8 Mbits/sec
[ 5] 0.00-10.06   sec  40.5 MBytes 33.8 Mbits/sec
sender
receiver
```

Download data

```
C:\Windows\system32\cmd.exe
C:\Users\Darren MacBook>D:\iperf局域网测性能工具3.0.11\iperf-3.0.11-win64\iperf.exe -c 192.168.1.4
Connecting to host 192.168.1.4, port 5201
[ 4] local 192.168.1.3 port 53158 connected to 192.168.1.4 port 5201
[ ID] Interval      Transfer    Bandwidth
[ 4] 0.00-1.00    sec  3.88 MBytes 32.5 Mbits/sec
[ 4] 1.00-2.01    sec  4.62 MBytes 38.4 Mbits/sec
[ 4] 2.01-3.00    sec  4.75 MBytes 40.1 Mbits/sec
[ 4] 3.00-4.00    sec  5.12 MBytes 43.0 Mbits/sec
[ 4] 4.00-5.01    sec  5.12 MBytes 42.7 Mbits/sec
[ 4] 5.01-6.00    sec  4.50 MBytes 38.0 Mbits/sec
[ 4] 6.00-7.00    sec  4.88 MBytes 40.9 Mbits/sec
[ 4] 7.00-8.00    sec  5.00 MBytes 41.9 Mbits/sec
[ 4] 8.00-9.00    sec  5.12 MBytes 43.1 Mbits/sec
[ 4] 9.00-10.00   sec  5.25 MBytes 43.8 Mbits/sec
-----
[ ID] Interval      Transfer    Bandwidth
[ 4] 0.00-10.00   sec  48.2 MBytes 40.5 Mbits/sec
[ 4] 0.00-10.00   sec  48.2 MBytes 40.5 Mbits/sec
sender
receiver
```

Test environment: WIFI is 10M away from the router in a barrier-free environment; upload data: 33M, download data: 40M

