

FPC-LE-S1

Compact Flexible LTE Antenna



Product Description

The FPC-LE-S1 is a compact and flexible LTE design antenna, covering the worldwide LTE frequency from 698~960 & 1710~2690MHz. This is a compact LTE antenna design without compromise the antenna performance. The antenna is attached to the surface via 3M adhesive tape. If necessary, please feel free to contact us for the customized design or antenna fine-tuned service if the frequency is drift after the antenna is attached inside the product.



Highlight

- ✓ Compact design combined with high performance antenna element
- ✓ Ground independent design
- ✓ Cable side entry design
- ✓ Standard cable & connector are 1.37 with IPEX connector terminated.

Feature

- ✓ Worldwide LTE frequency.
- ✓ Support 2G /3G /4G cellular frequency

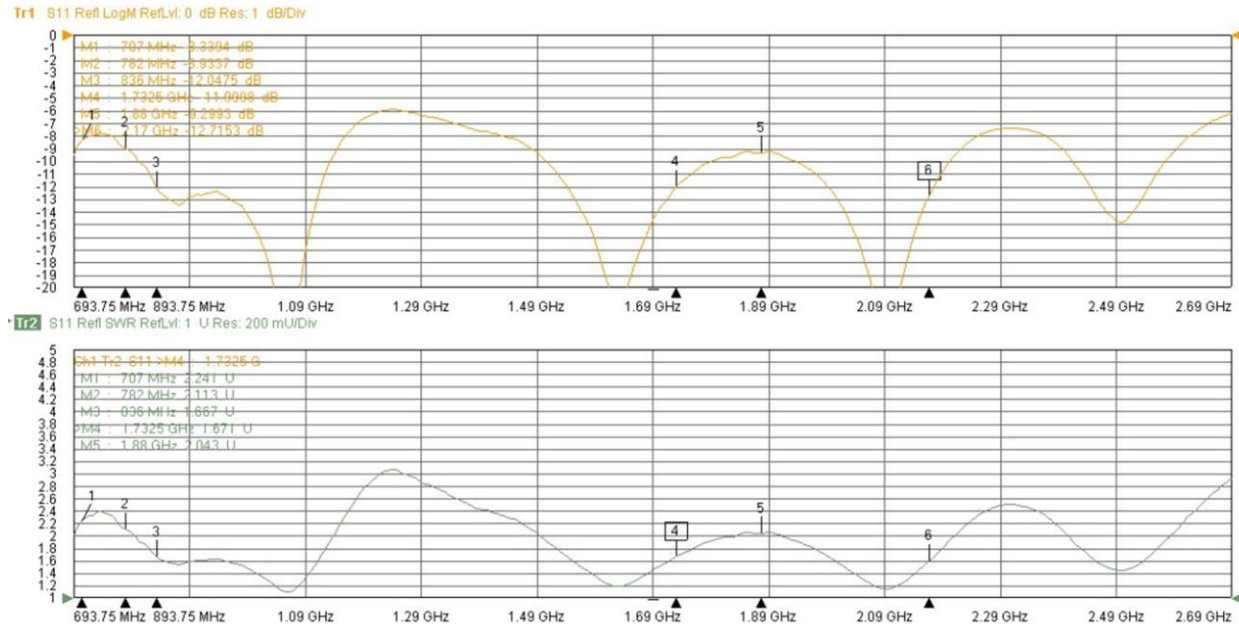
Mechanical Specification

Dimension	95mm(L) x 15mm(W)
Mounting	3M adhesive tape
Cable	OD1.37 cable - standard
Connector	IPEX - standard
Material	Flexible PCB
Operation Temperature	-30°C ~ +80°C
Storage Temperature	-40°C ~ +85°C
Weight	10g with a 150mm 1.37 cable

Electrical Specification - Cellular

Frequency	698~960 & 1710~2690MHz
Gain(Peak)	1.26 dBi @ 698~960MHz 4.87 dBi @ 1710~2690MHz
Efficiency	55.31% @ 698~960MHz 71.93% @ 1710~2690MHz
Impedance	50Ω
Return Loss	< -7dB @ 698~960MHz & 1710~2690MHz
Polarization	Linear

Antenna Measurement _ Return & VSWR



Antenna Measurement _ Gain & Efficiency

Frequency(MHz)	707	734	746	766	782	824	836	868	880
Directivity(dBi)	3.39	2.72	2.45	2.64	2.66	2.88	2.99	3.27	3.21
Efficiency(%)	33.94	27.51	28.30	29.74	39.38	39.72	41.18	46.30	49.82
Peak Gain(dBi)	-1.30	-2.87	-3.02	-2.62	-1.38	-1.12	-0.86	-0.07	0.19
Frequency(MHz)	915	1710	1733	1755	1785	1805	1850	1880	1920
Directivity(dBi)	3.83	4.13	4.30	4.41	4.50	4.45	4.33	4.38	4.53
Efficiency(%)	55.31	60.51	61.67	63.88	66.78	64.35	59.47	61.72	66.44
Peak Gain(dBi)	1.25	1.95	2.20	2.46	2.75	2.54	2.07	2.28	2.76
Frequency(MHz)	1990	2110	2133	2155	2300	2400	2520		
Directivity(dBi)	5.54	6.27	6.25	6.16	6.64	6.49	6.10		
Efficiency(%)	71.92	69.31	68.13	68.60	63.19	68.87	66.78		
Peak Gain(dBi)	4.10	4.68	4.59	4.53	4.65	4.87	4.35		

Note:

- The antenna is tested in the CTIA authorized anechoic chamber
- The cable type and length is 150mm OD1.37
- The connector type IPEX