

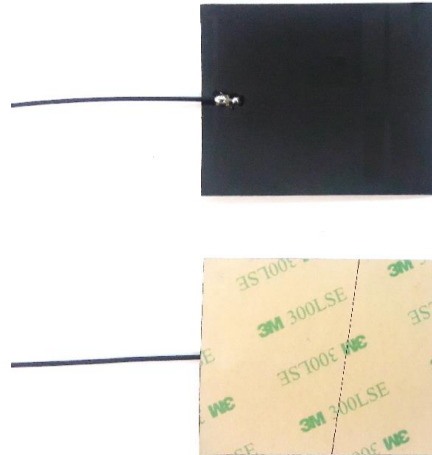
## FPC-LE-M1



### Product Description

The FPC-LE-M1 is a flexible LTE antenna design, covering the US LTE frequency from 698~915 & 1710~2170MHz. This is a special LTE antenna design for the US major carriers, Verizon & AT&T, etc. 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.

### Compact Flexible LTE Antenna



### Highlight

- ✓ High performance antenna element
- ✓ Ground independent design
- ✓ Cable middle entry design
- ✓ Standard cable & connector are 1.37 with IPEX connector terminated.

### Feature

- ✓ Support 2G /3G /4G cellular frequency
- ✓ Designed for the US LTE bands

### Mechanical Specification

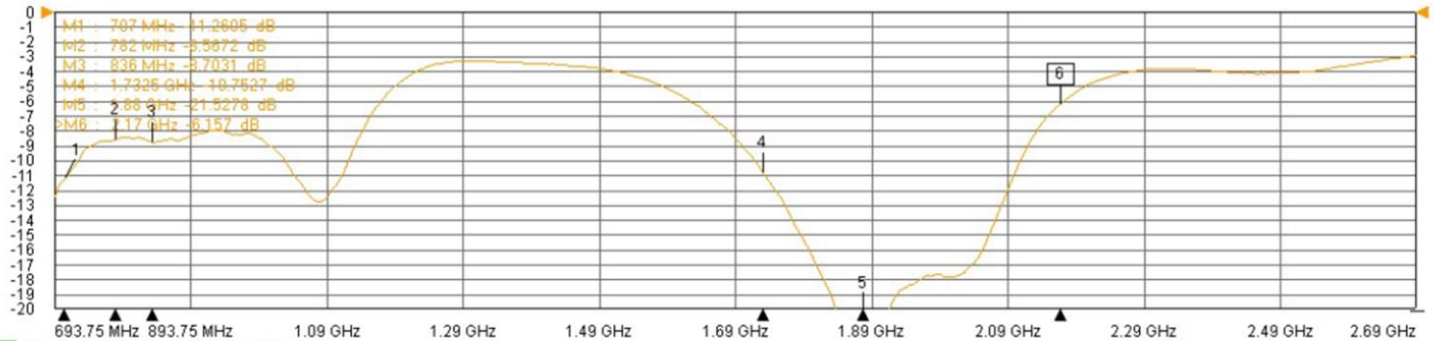
<b>Dimension</b>	66mm(L) x 53mm(W)
<b>Mounting</b>	3M adhesive tape
<b>Cable</b>	OD1.37 cable - standard
<b>Connector</b>	IPEX - standard
<b>Material</b>	Flexible PCB
<b>Operation Temperature</b>	-30°C ~ +80°C
<b>Storage Temperature</b>	-40°C ~ +85°C
<b>Weight</b>	10g with a 150mm 1.37 cable

### Electrical Specification - Cellular

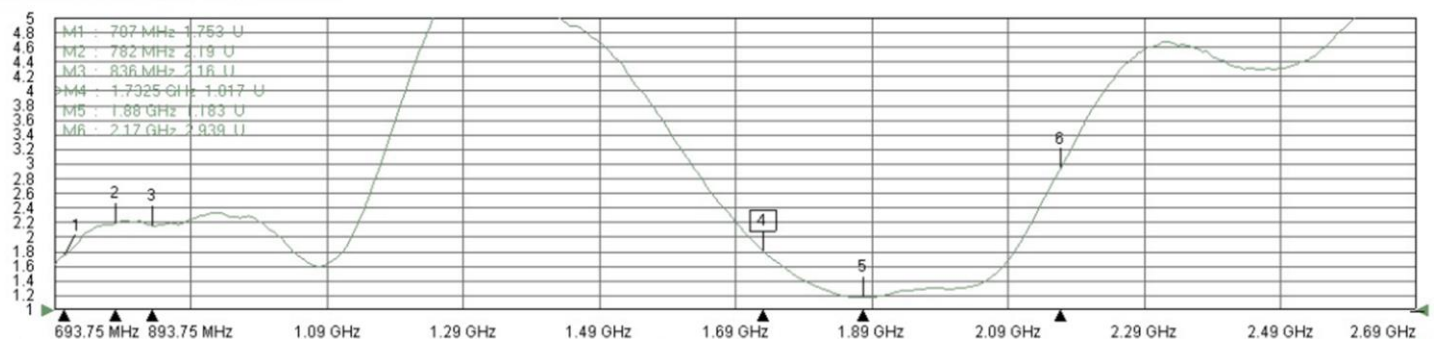
<b>Frequency</b>	698~915 & 1710~2170MHz
<b>Gain(Peak)</b>	-0.20 dBi @ 698~915MHz 4.40 dBi @ 1710~2690MHz
<b>Efficiency</b>	42.64% @ 698~915MHz 71.40% @ 1710~2170MHz
<b>Impedance</b>	50Ω
<b>Return Loss</b>	< -8dB @ 698~915MHz & 1710~2170MHz
<b>Polarization</b>	Linear

### Antenna Measurement \_ Return & VSWR

Tr1 S11 RefL LogM RefLvl: 0 dB Res: 1 dB/Div



Tr2 S11 RefL SWR RefLvl: 1 U Res: 200 mU/Div



### Antenna Measurement \_ Gain & Efficiency

Frequency(MHz)	707	734	746	766	782	824	836	868	880
Directivity(dBi)	-3.98	-4.87	-4.84	-4.79	-3.80	-4.25	-4.24	-4.05	-3.85
Efficiency(%)	39.98	32.51	32.80	33.11	41.64	37.53	37.63	39.30	41.12
Peak Gain(dBi)	-0.56	-2.04	-2.23	-2.02	-0.74	-1.52	-1.49	-1.28	-0.99
Frequency(MHz)	915	1710	1733	1755	1785	1805	1850	1880	1920
Directivity(dBi)	-3.70	-2.59	-2.00	-1.63	-1.46	-1.54	-1.62	-1.69	-1.88
Efficiency(%)	42.64	54.97	63.04	68.64	71.40	70.11	68.82	67.70	64.82
Peak Gain(dBi)	-0.20	1.88	2.25	2.31	2.19	2.10	2.83	3.45	3.55
Frequency(MHz)	1990	2110	2133	2155					
Directivity(dBi)	-1.46	-2.00	-2.15	-2.32					
Efficiency(%)	71.39	63.09	60.83	58.58					
Peak Gain(dBi)	3.40	4.29	4.40	4.38					

Note:

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