

Product Description

5G-P2 covers all cellular frequencies in 700-4000 MHz spectrum with excellent performance efficiency: higher than 50%. The ground plane independent antenna is designed for Cellular, 2.4GHz Wi-Fi, NB-IoT and ISM wireless applications and can be easily installed inside the enclosure of the device by double-side adhesive sticker. Customized antenna design service is welcome to discuss.

Highlight

- ✓ Wideband covering 5G bands and LTE
- ✓ High radiation efficiency
- ✓ Suitable for embedded systems
- ✓ Ground Plane Independent
- ✓ Thin and small-size
- ✓ Easy installation
- ✓ RoHS Compliant

5G-P2

Multiband PCB Antenna: Industrial Cellular 5G NR / C-Band & LTE Bands FR4 Wideband Antenna



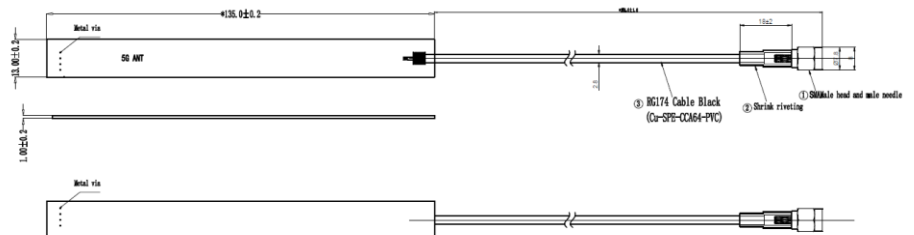
Electrical Specifications

Frequency	698 ~ 960MHz 1710 ~ 2690MHz 3300 ~ 3800MHz 3700 ~ 4000MHz (C-Band)
Gain (Peak)	2.56 dBi @ 698 ~ 960MHz 3.41 dBi @ 1710 ~ 2690MHz 4.93 dBi @ 3300 ~ 3800MHz 4.72 dBi @ 3700 ~ 4000MHz
Efficiency (Peak)	53.86% @ 698 ~ 960MHz 58.42% @ 1710 ~ 2690MHz 54.94% @ 3300 ~ 3800MHz 46.63% @ 3700 ~ 4000MHz
VSWR	<3.96 @ 698 ~ 960MHz <2.37 @ 1710 ~ 2690MHz <1.48 @ 3300 ~ 3800MHz <2.43 @ 3700 ~ 4000MHz
Polarization	Vertical
Impedance	50Ω

Mechanical Specifications

Dimension	135.0(L) x 13.0(W) mm
Connector	SMA or Other RF Connectors
Cable	RG-174, LMR-100 or other RF Cables
Mounting	3M Tape or without tape
Operation Temperature	-30° ~ +70°C
Storage Temperature	-30° ~ +75°C
RoHS	Compliant

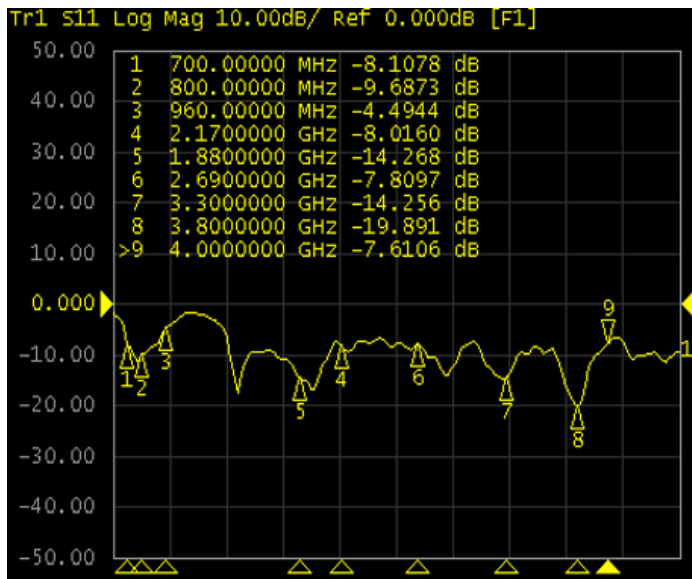
Internal Antenna Drawing:



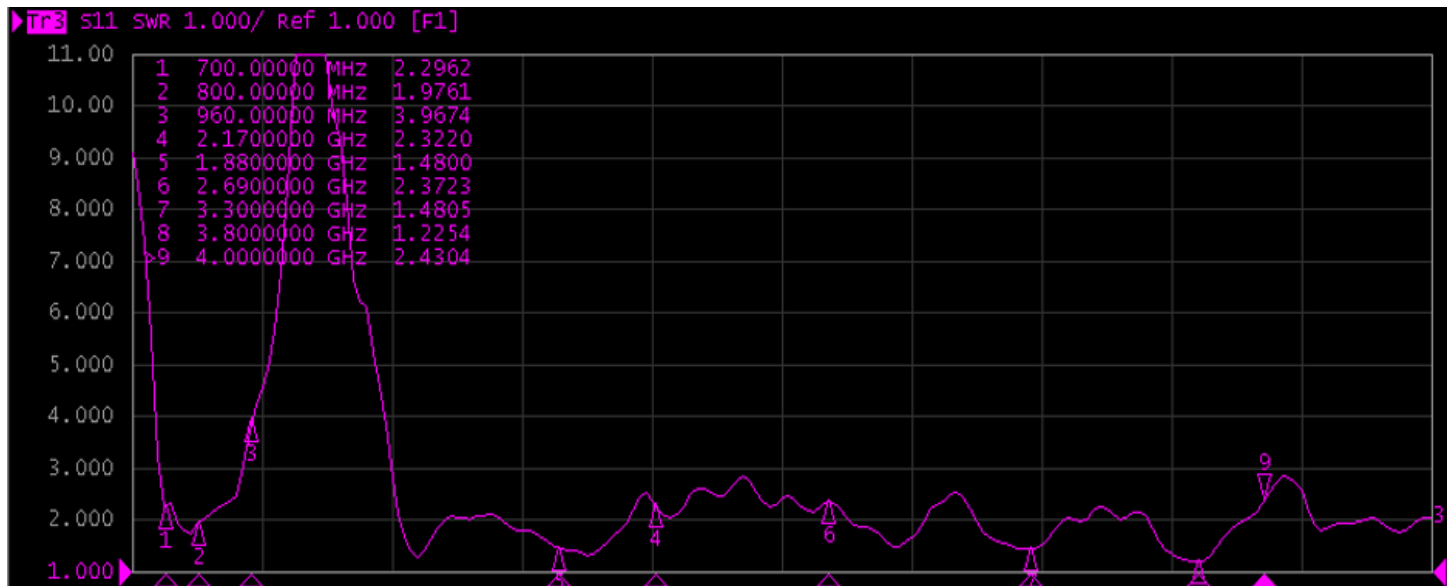


VSWR & Return Loss

Return Loss Curve

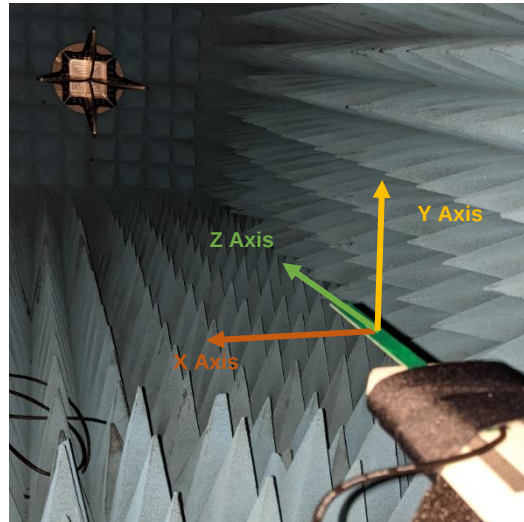
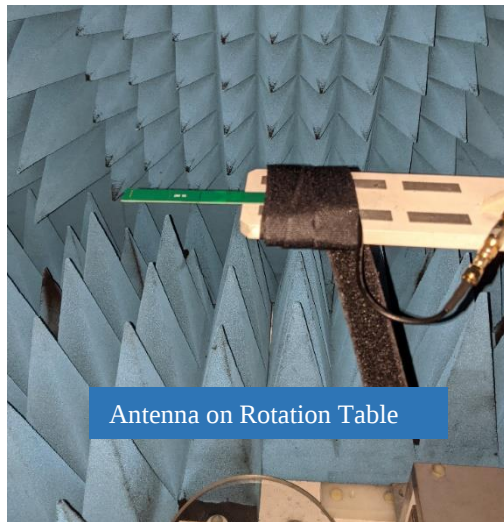


VSWR Curve



Tape Mount 5G Low Profile Antenna

Antenna Testing & Setup in Anechoic Chamber



- Antenna Efficiency Chart

Frequency	Efficiency	Gain	Frequency	Efficiency	Gain	Frequency	Efficiency	Gain	Frequency	Efficiency	Gain
700	45.66%	1.13	1700	54.83%	1.29	2340	54.33%	3.31	3480	50.72%	4.42
710	46.42%	1.14	1720	54.05%	1.33	2360	54.95%	3.39	3500	51.62%	4.33
720	45.11%	1.00	1740	53.95%	1.36	2380	54.49%	3.41	3520	49.67%	4.36
730	45.13%	1.19	1760	53.09%	1.37	2400	53.38%	3.35	3540	48.25%	4.17
740	48.46%	1.67	1780	52.46%	1.37	2420	52.96%	3.29	3560	48.25%	4.04
750	48.72%	1.85	1800	51.88%	1.39	2440	52.59%	2.99	3580	48.10%	4.02
760	46.36%	1.72	1820	50.36%	1.25	2460	51.95%	2.76	3600	49.47%	4.07
770	50.63%	2.22	1840	49.57%	1.20	2480	51.07%	2.59	3620	48.78%	4.30
780	52.50%	2.52	1860	49.78%	1.28	2500	49.75%	2.43	3640	47.60%	4.60
790	53.86%	2.56	1880	50.98%	1.49	2520	49.61%	2.32	3660	47.76%	4.93
800	51.90%	2.11	1900	52.49%	1.77	2540	49.18%	2.53	3680	46.08%	4.24
810	50.37%	2.07	1920	53.64%	1.97	2560	48.73%	2.76	3700	45.49%	4.72
820	50.36%	2.07	1940	55.73%	2.24	2580	48.42%	2.88	3720	46.09%	3.97
830	50.95%	2.25	1960	56.81%	2.48	2600	48.44%	3.01	3740	46.08%	3.18
840	49.59%	2.41	1980	58.30%	2.71	2620	47.92%	2.87	3760	46.11%	3.36
850	48.78%	2.55	2000	58.42%	2.84	2640	47.55%	2.85	3780	45.95%	3.35
860	48.13%	1.44	2020	57.84%	2.93	2660	47.30%	2.81	3800	46.04%	3.35
870	49.56%	1.31	2040	56.94%	2.95	2680	49.38%	2.65	3820	46.57%	3.28
880	48.65%	1.58	2060	55.94%	2.75	2700	49.10%	2.60	3840	46.63%	3.12
890	49.12%	1.68	2080	53.46%	2.37	3300	53.33%	3.70	3860	46.08%	3.02
900	46.90%	0.52	2100	52.79%	1.93	3320	54.18%	3.96	3880	46.02%	2.83
910	44.13%	0.36	2120	52.58%	1.47	3340	54.94%	4.00	3900	46.06%	2.71
920	41.27%	0.16	2140	51.96%	2.03	3360	54.62%	4.22	3920	45.27%	2.57
930	40.51%	-0.31	2160	54.20%	2.79	3380	53.48%	4.29	3940	45.14%	2.50
940	37.78%	-0.58	2180	55.70%	3.13	3400	52.07%	4.39	3960	44.75%	1.25
950	34.65%	-0.93	2200	55.03%	3.23	3420	54.29%	4.41	3980	44.78%	1.91
960	32.52%	-1.09	2300	54.58%	3.23	3440	52.66%	4.50	4000	45.04%	1.38
			2320	54.73%	3.29	3460	50.15%	4.49	4020	42.03%	1.73

Antenna Efficiency Curve

- 700 ~ 4020MHz

