

Product Description

5G-P2H 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 externally outside the device by double-side adhesive sticker. Installed inside the enclosure is optional. Customized 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
- ✓ Heat shrink covered if put out outside the device.

5G-P2H

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



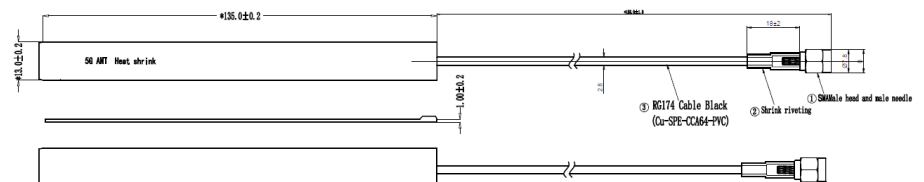
Electrical Specifications

Frequency	698 ~ 960MHz 1710 ~ 2690MHz 3300 ~ 3800MHz 3700 ~ 4000MHz (C-Band)
Gain (Peak)	3.46 dBi @ 698 ~ 960MHz 3.33 dBi @ 1710 ~ 2690MHz 5.79 dBi @ 3300 ~ 3800MHz 5.18 dBi @ 3700 ~ 4000MHz
Efficiency (Peak)	56.58% @ 698 ~ 960MHz 66.31% @ 1710 ~ 2690MHz 53.60% @ 3300 ~ 3800MHz 51.43% @ 3700 ~ 4000MHz
VSWR	<4.28 @ 698 ~ 960MHz <2.19 @ 1710 ~ 2690MHz <1.56 @ 3300 ~ 3800MHz <2.16 @ 3700 ~ 4000MHz
Polarization	Vertical
Impedance	50Ω

Mechanical Specifications

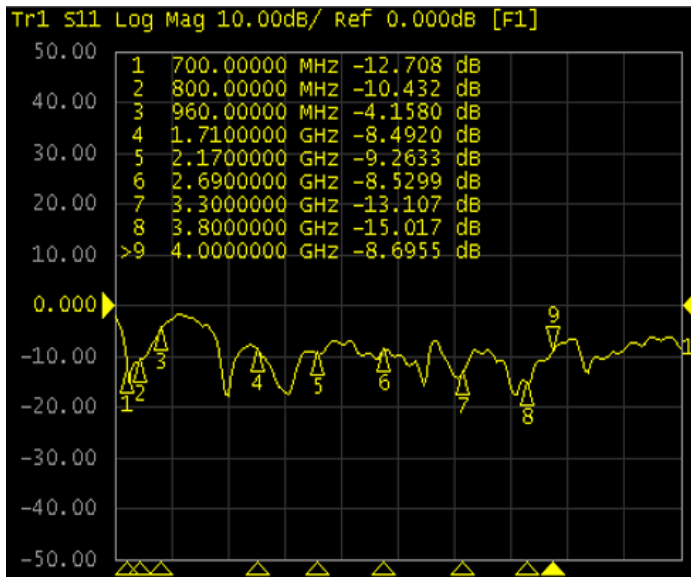
Dimension	135.0(L) x 13.0(W) mm
Connector	SMA or Other RF Connectors
Cable	RG-174, LMR-100 or other RF Cables
Mounting	3M Tape or without tape
Operation Temperature	-30° ~ +70°C
Storage Temperature	-30° ~ +75°C
RoHS	Compliant

Internal Antenna Drawing:

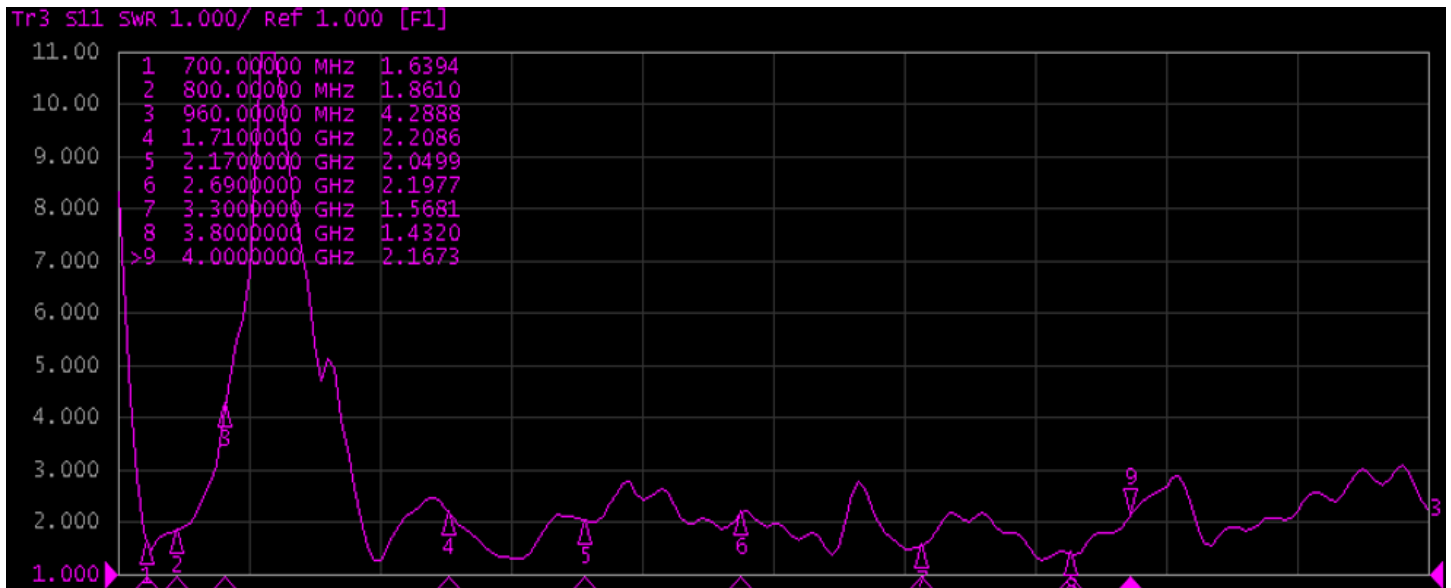


VSWR & Return Loss

Return Loss Curve

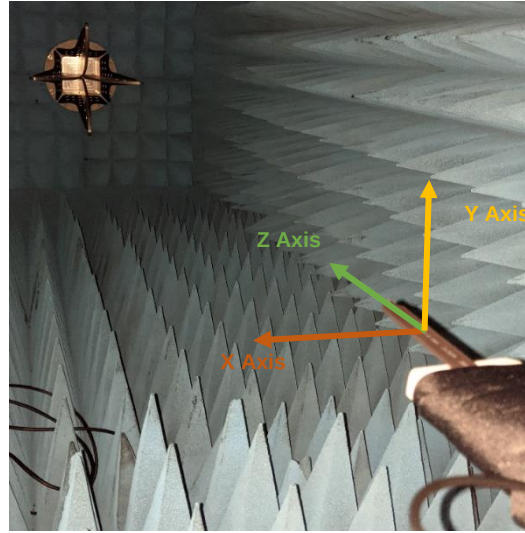
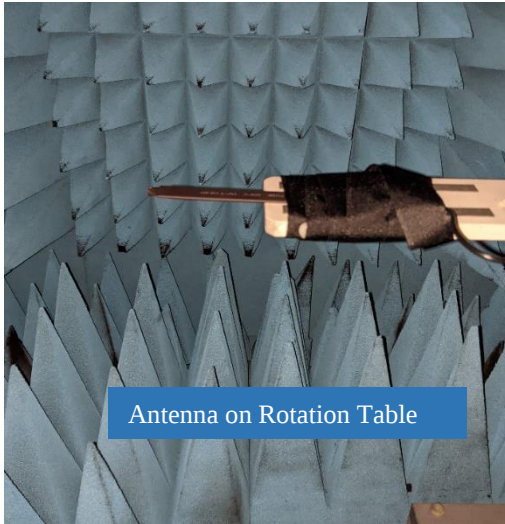


VSWR Curve



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	46.80%	1.78	1700	61.80%	1.59	2340	56.96%	3.09	3480	49.27%	4.24
710	47.77%	1.93	1720	61.21%	1.62	2360	57.77%	3.23	3500	48.52%	4.35
720	45.84%	1.89	1740	61.39%	1.66	2380	57.53%	3.29	3520	50.29%	5.62
730	46.31%	2.19	1760	60.46%	1.70	2400	56.61%	3.29	3540	51.74%	5.69
740	47.49%	2.56	1780	59.78%	1.82	2420	56.75%	3.33	3560	52.78%	5.68
750	48.72%	2.73	1800	59.20%	1.88	2440	54.70%	3.13	3580	53.60%	5.72
760	47.69%	2.56	1820	57.88%	1.91	2460	53.42%	3.01	3600	53.33%	5.77
770	49.32%	3.03	1840	57.29%	1.90	2480	52.08%	2.88	3620	52.68%	5.79
780	54.57%	3.33	1860	57.73%	1.92	2500	50.14%	2.58	3640	50.98%	5.74
790	56.25%	3.46	1880	59.19%	2.03	2520	49.70%	2.40	3660	52.73%	5.58
800	55.12%	2.29	1900	60.92%	2.21	2540	49.92%	2.31	3680	51.56%	5.42
810	56.58%	2.21	1920	62.18%	2.42	2560	49.58%	2.29	3700	50.61%	5.18
820	56.04%	2.19	1940	64.19%	2.58	2580	49.62%	2.35	3720	47.46%	4.94
830	55.71%	2.20	1960	65.18%	2.60	2600	49.89%	2.41	3740	47.75%	4.63
840	55.33%	2.28	1980	66.31%	2.61	2620	48.17%	2.28	3760	48.11%	4.31
850	55.30%	2.09	2000	65.80%	2.67	2640	48.15%	2.23	3780	47.98%	3.76
860	54.32%	1.77	2020	64.42%	2.69	2660	47.95%	2.16	3800	47.65%	3.08
870	53.16%	1.60	2040	62.33%	2.81	2680	46.61%	2.16	3820	47.74%	2.30
880	52.88%	1.42	2060	59.55%	2.80	2700	46.33%	2.20	3840	49.73%	2.26
890	51.17%	1.07	2080	54.80%	2.61	3300	53.01%	3.14	3860	50.29%	2.24
900	48.38%	0.67	2100	52.55%	2.11	3320	54.15%	3.22	3880	51.43%	2.18
910	45.37%	0.23	2120	50.57%	1.50	3340	52.99%	3.03	3900	50.37%	2.00
920	42.30%	-0.09	2140	51.05%	1.79	3360	52.17%	3.13	3920	50.41%	1.66
930	39.73%	-0.48	2160	54.76%	2.25	3380	50.26%	3.24	3940	50.97%	1.53
940	37.61%	-0.83	2180	56.96%	2.47	3400	50.08%	3.54	3960	47.79%	1.35
950	35.38%	-1.15	2200	56.93%	2.70	3420	49.70%	3.73	3980	47.69%	1.20
960	33.43%	-1.54	2300	56.99%	2.81	3440	49.64%	3.94	4000	48.19%	1.41
			2320	57.38%	2.99	3460	49.05%	4.07	4020	48.11%	1.60

Antenna Efficiency Curve

- 700 ~ 4020MHz

Efficiency

