

PROFESSOR TECHNOLOGY CO.,LTD.

INTRODUCTION MIMO Antenna CP04D(2-in-1) Permanent Mount (Screws M12x1P)

2-Cables :2 xLTE

Cables1-2: LTE/4G/3G/2G 690-960/1710-2170/2500-2700MHz2-5dBi

1. GENERAL DESCRIPTION

Model No	Products P/N
CP04D-LTE_x2-3M(10ft)-SMA/M	CP04D-V1-3M(10')

Below is a table summarizing the LTE/4G/3G/GS (2-in-1) antenna design specification

Cable 1-2:

2.1 LTE/4G/3G/GSM Multi-band Antenna Electrical Properties

Parameter	Description
Communication System	4G/3G/AMPS/GSM/DCS/UMTS/LTE
Frequency Band (MHz)	690~960/1710~2170/2500~2700MHz
Average Efficiency	47%/67%/59%/54%
Average Gain	2.0~4.0dBi
Nominal Impedance	50 ohm
Polarization	Vertical
Radiation Pattern	Omni-directional
Return Loss	Please See Data
V.S.W.R	<1.5 : 1
Note: Gain includes the cable loss	

2.2 LTE/5G/4G/3G Multi-band Antenna Mechanical Properties

Parameter	Description
Antenna Type	External Antenna
Mount Type	Screw Type (M16)
Antenna cable	RG174 Low loss cable
Connector Type	SMA 180°(Male)

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Antenna Cable Total Length	3000mm(10ft) ±50mm
Antenna Color	Black
Waterproof	100% waterproof.(IP66~IP67)
Operating Temperature Range	-35 °C~+75 °C
Storage Temperature Range	-40 °C~+80 °C
Shock (Drop Test)	25CM drop on concret



**3. Antenna Appearance Size: M12 x1P
Diameter :53 mm (2.08”) Height : 23 mm (0.9”)**

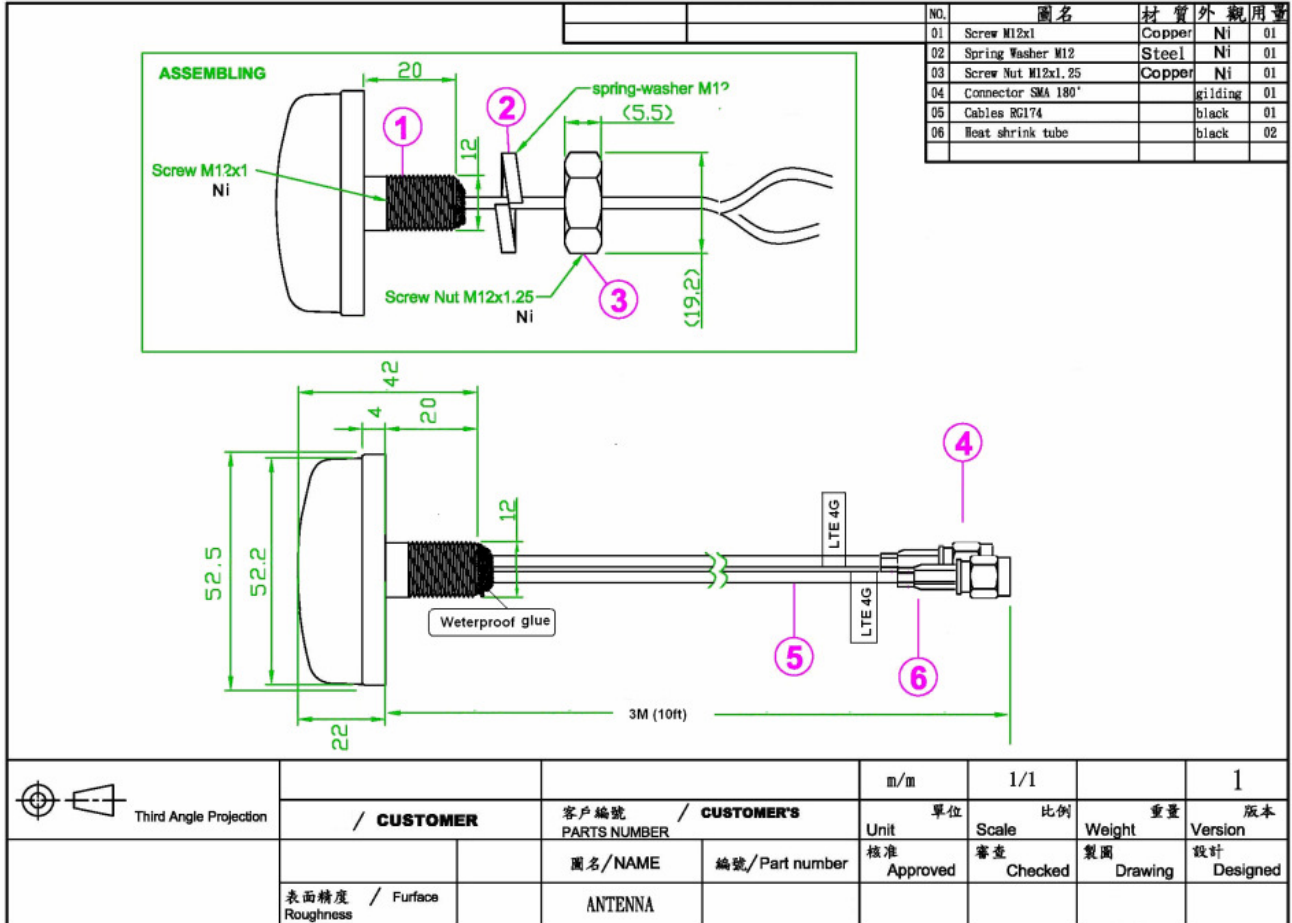
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4.CP04D(2-in-1) antenna actual picture appearance



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4-1. Antenna Appearance:



4-2 CP04D (2-in-1) antenna actual picture appearance



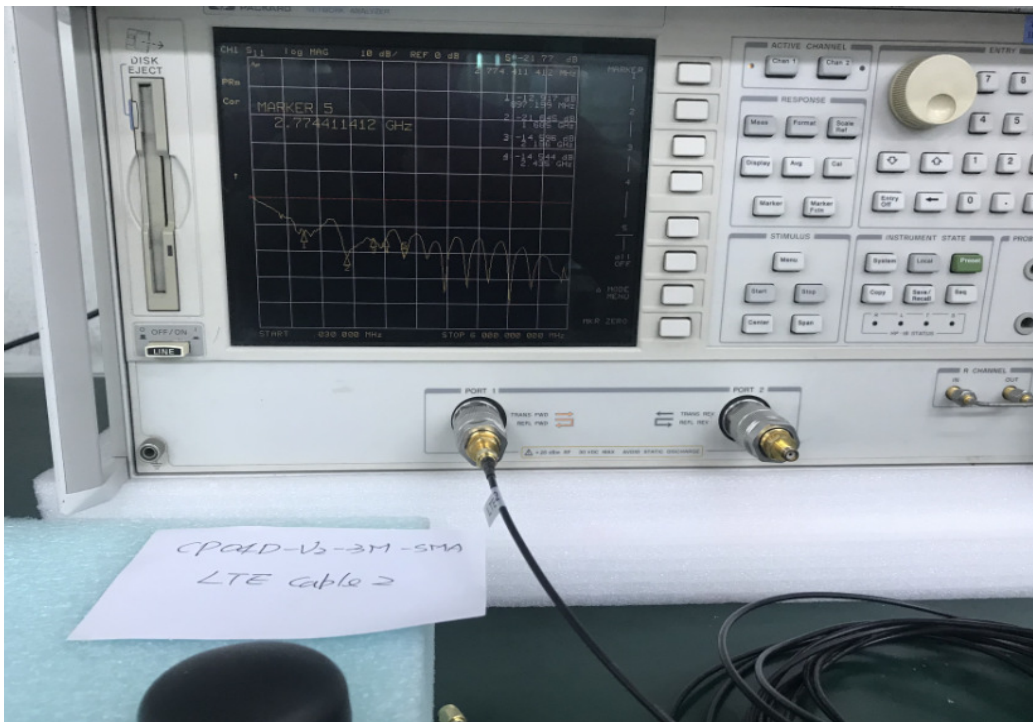
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5.LTE/4G/3G/2G Multi -band Network analyzer test Frequency : 690~960/1710~2170/2500~2700MHz

Cable 1:



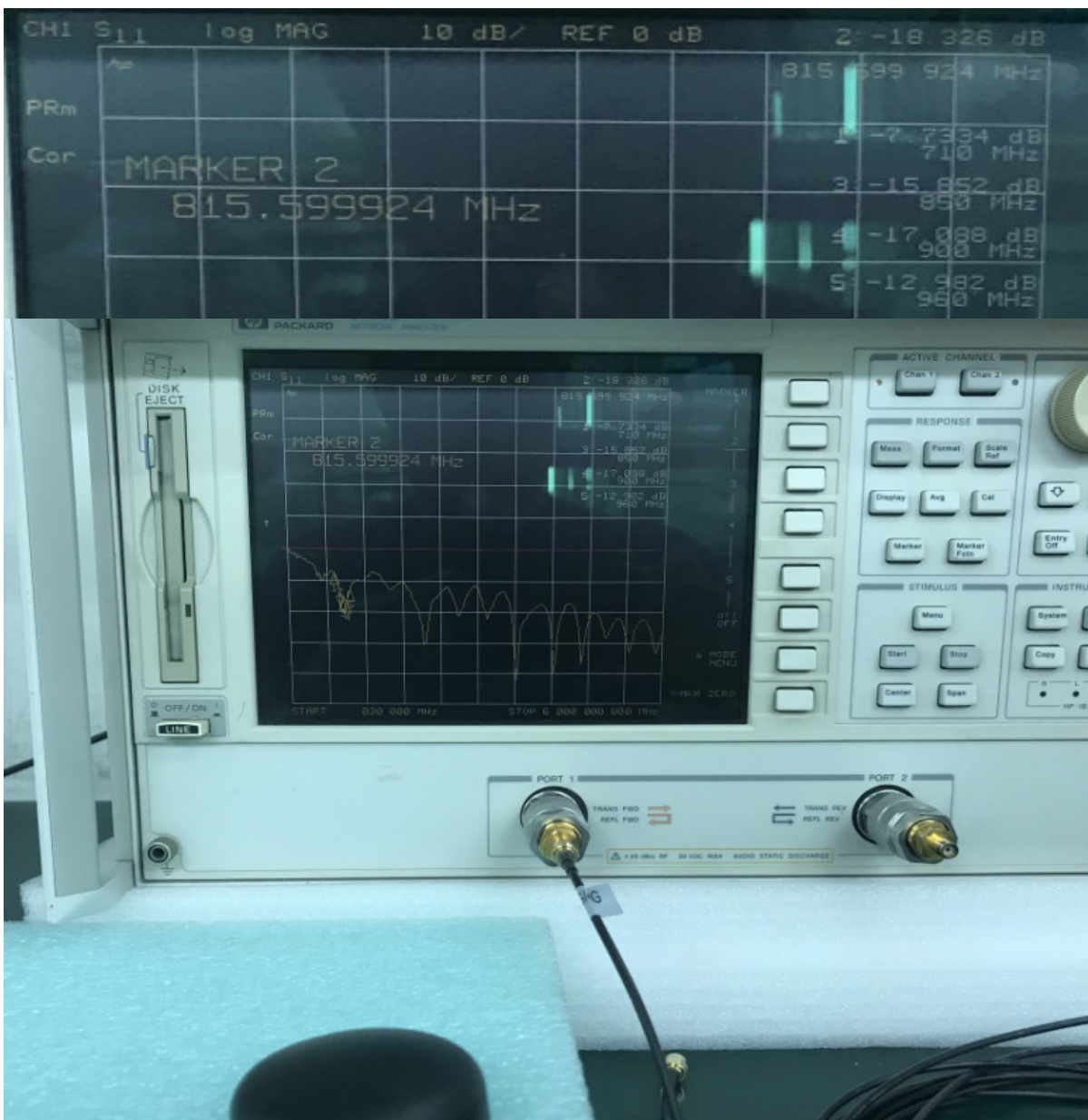
Cable 2:



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5-1 Detail band test - Frequency : 690~960MHz

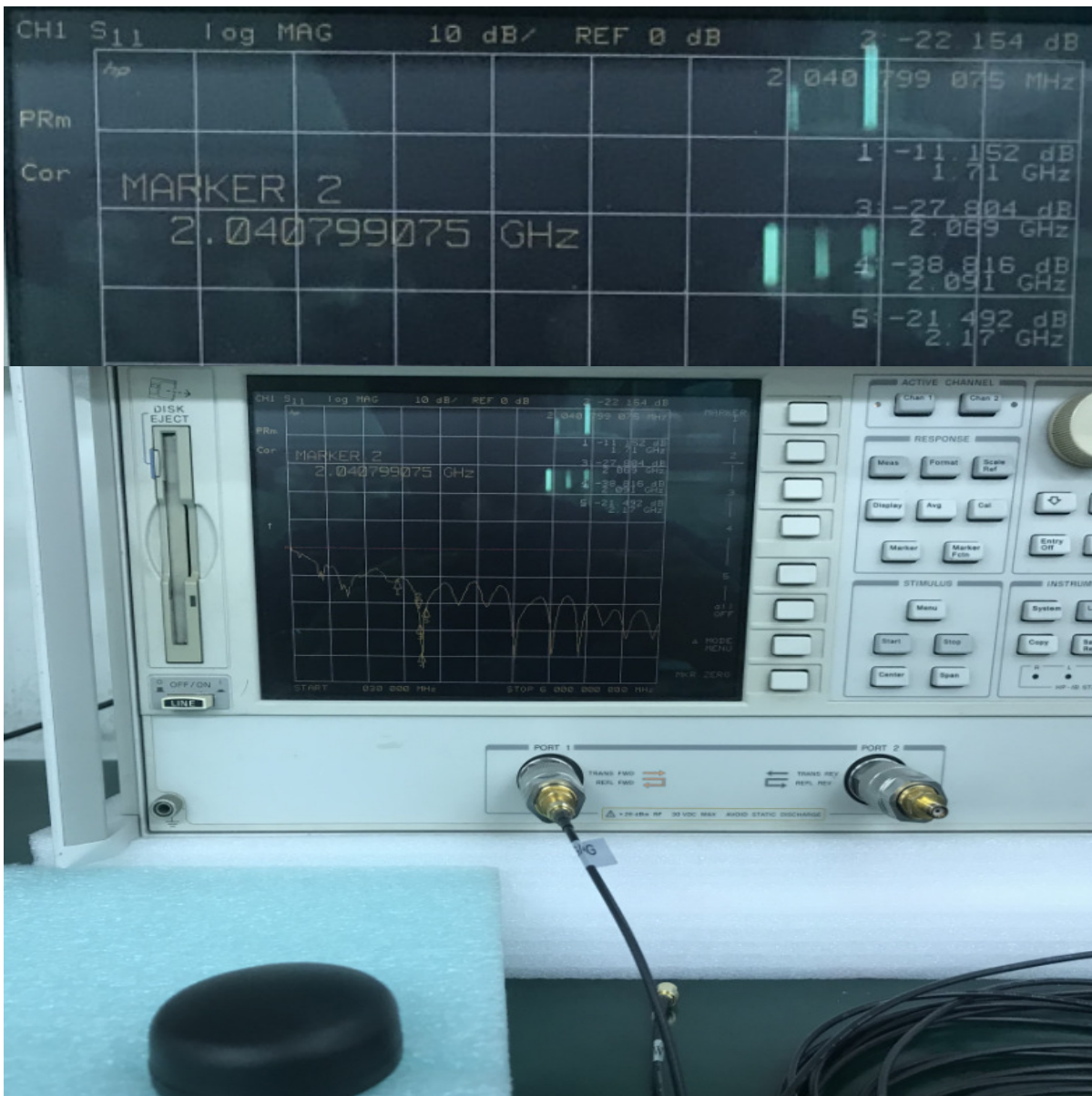
Frequency	Return loss	V.S.W.R	Reflection coefficient
710.000MHz	-7.7334dB	2.393:1	0.411
815.599MHz	-18.326dB	1.276:1	0.121
864.799MHz	-15.852dB	1.384:1	0.161
900.000MHz	-17.088dB	1.325:1	0.140
960.000MHz	-12.982dB	1.578:1	0.224



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8-2 Detail band test - Frequency : 1710~2170MHz

Frequency	Return loss	V.S.W.R	Reflection coefficient
1710.00MHz	-11.152dB	1.766:1	0.277
2040.79MHz	-22.154dB	1.169:1	0.078
2069.00MHz	-27.804dB	1.085:1	0.041
2091.00MHz	-38.816dB	1.023:1	0.011
2170.00MHz	-21.492dB	1.184:1	0.084



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8-3 Detail band test - Frequency : 2500-2700Mhz

Frequency	Return loss	V.S.W.R	Reflection coefficient
2500.00MHz	-12.551dB	1.617:1	0.236
2642.39MHz	-18.400dB	1.273:1	0.120
2652.00MHz	-18.754dB	1.261:1	0.115
2683.00MHz	-19.857dB	1.226:1	0.102
2700.00MHz	-20.413dB	1.211:1	0.095

