

深圳市拓惟科技有限公司

物料承认书

客户名称	深圳市道通智能航空技术股份有限公司
客户编码	204002689
品名	智能遥控器（7.9寸新）
物料品牌	佳邦
物料型号	DAM-A2-N7-N0-000-65-13
送样日期	2025年4月28日

本公司确认			
审核	核准	制图	
丁露露	黄勇涛	吴析达	

客户确认		
采购	工程	品质

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8禾邦电子（苏州）有限公司 INPAQ Technology Co. Ltd.					Reversion		Engineering Change Description		Date		Owner	
					P0		首次		2024-12-20		靳静	
请见附录天线照片文件 See the antenna photo file in the appendix												
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DAM-A2-N7-N0-000-65-13

1. Explanation of Part Number

DAM	A2	N7	N0	000	65	13
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Product type : DAM-Dipole Antenna Module

(2) Appearance Series : A2

(3) Frequency :N7= 902~928MHz &1420~1450MHz &2400~2485MHz
&5150~5850MHz

(4) Coaxial Cable Specification : N0=No Cable

(5) Coaxial Cable Length : 000

(6) Connector Types :65= SMA- 180°公头公针

(7) Suffix for special requirements : 13

※ RoHS Compliant

2. Electrical properties:

Item	Property
Frequency Range	902~928MHz&1420~1450MHz 2400~2485MHz& 5150~5850MHz
Impedance	50 Ω (Typ.)
VSWR	6.0MAX@902~928MHz 3.0MAX@1420~1450MHz 4.0MAX@2400~2485MHz 3.0MAX@5150~5850MHz
Peak Gain	-0.77dBi@902~928MHz 1.24dBi@1420~1450MHz 2.94dBi@2400~2485MHz 3.37dBi@5150~5850MHz

*此款天线为客户自行设计，仅有单天线电性，无装机电性。

2-1 Antenna Performance Test

请见附录天线照片文件

See the antenna photo file in the appendix

UNLESS OTHER SPECIFIED TOLERANCES ON :
X=N/R X.X=N/R X.XX =N/R
ANGLES=N/R HOLEDIA=N/R



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/R

UNIT : mm

DRAWN BY : 靳静

CHECKED BY : 赵付辉

DESIGNED BY : 董明辰

APPROVED BY : 赵付辉

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TITLE : DAM-A2-N7-N0-000-65-13 工规

DOCUMENT
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INPAQ TECHNOLOGY CO., LTD.

SCALE : N/R	UNIT : mm
DRAWN BY : 靳静	CHECKED BY : 赵付辉
DESIGNED BY : 董明辰	APPROVED BY : 赵付辉

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2-2 Gain and Radiation Pattern

2-2.1 Measure method

- 1. Using a low loss coaxial cable to link a standard handset jig
- 2. Fixed this handset jig on chamber's rotator plane
- 3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
- 4. Using another standard gain horn antenna to calibrated those data

2-2.2 Chamber definition

- 量测仪器: 微波暗室, 网络分析仪, 标准天线.
- 微波暗室说明:

这是本公司设置在深圳的微波暗室, 本微波暗室是属于一套远场量测系统,暗室的大小为 2.6 米 x1.6 米 x1.6 米 , 静区尺寸(Quiet zone)大小为 15 厘米 x15 厘米 x15 厘米。

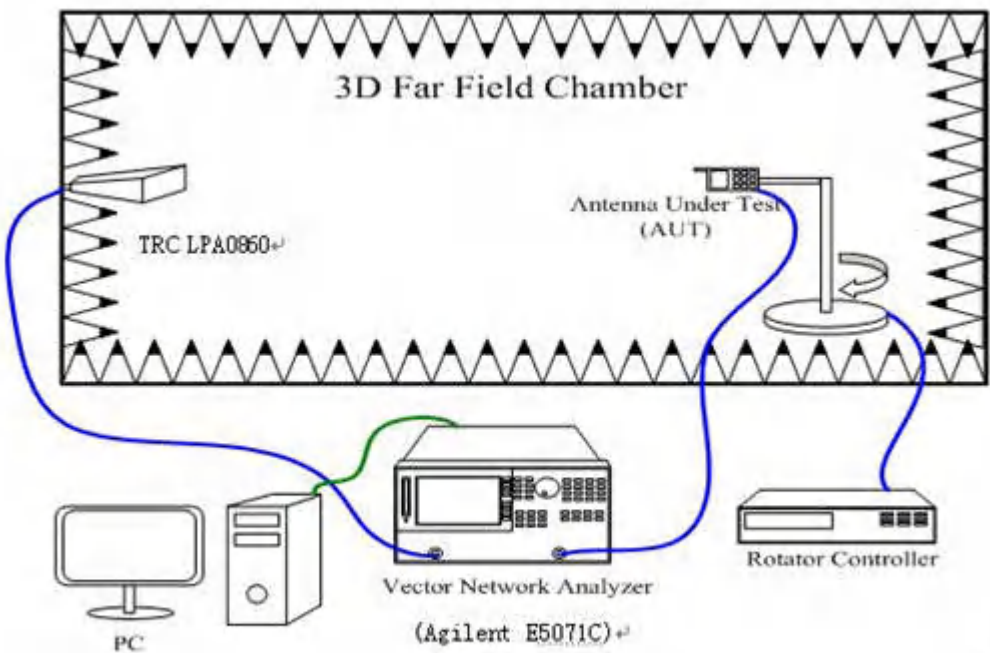


图. 1. 微波暗室内部仪器设置 r.

图. 1 为微波暗室内的仪器设置及网络分析仪的联接图, 发射天线(本暗室所使用发射天线的型号为 TRC LPA0860 800MHZ-6GHZ)到待测天线(AUT)的距离为 1.35 米, 待测天线放置在旋转平台上,藉由控制转台旋转的角度可对待测天线做概略性及较为准确的量测。

将待测天线放置于旋转台上,并测得其各个平面(ZY 平面及 ZX 平面)的 360 度场强数据。再将待测天线换置成标准偶极天线(本暗室所使用的标准偶极天线型号为 TRC AD series dipole antenna 800MHz~2500MHz)将其 360 度的场强数据测出, 以作换算增益标准值, 经由式 1 的换算即可获得待测天线的增益值及方向图。

UNLESS OTHER SPECIFIED T	
X=N/R	X.X=N/R
ANGLES=N/R	
SCALE : N/R	
DRAWN BY : 靳静	
DESIGNED BY : 董明辰	

$$G_{AUT} = G_{stand} + P_{AUT} - P_{stand}$$

G_{AUT} : Gain of AUT
 G_{stand} : Gain of Standard Gain Antenna
 P_{AUT} : Measured Power of AUT
 P_{stand} : Measured Power of Standard Gain Antenna

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2-2.3 Efficiency & Gain (dBi)

Test Condition	Average gain (dB)	Efficiency (%)	Peak Gain (dBi)
902	-2.66	54.2	-1.84
904	-2.92	51.05	-2.46
906	-2.55	55.59	-2.04
908	-2.73	53.39	-1.28
910	-2.56	55.46	-1.12
912	-2.98	50.39	-1.51
914	-2.99	50.28	-1.66
916	-3.16	48.34	-1.17
918	-3.12	48.75	-0.84
920	-3.25	47.34	-1
922	-3.28	46.99	-1.88
924	-3.47	44.98	-2.02
926	-3.86	41.08	-1.3
928	-3.89	40.82	-0.77
1420	-1.56	69.82	1.24
1425	-1.63	68.71	0.71
1430	-1.37	72.95	0.74
1435	-1.64	68.55	0.41
1440	-1.56	69.82	1.24
1445	-1.63	68.71	0.71
1450	-1.37	72.95	0.74

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X=N/R X.X=N/R X.XX =N/R
ANGLES=N/R HOLEDIA=N/R



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UNIT : mm

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APPROVED BY : 赵付辉

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Test Condition	Average gain (dB)	Efficiency (%)	Peak Gain (dBi)
2400	-3.68	42.89	0.28
2410	-3.47	44.99	1.05
2420	-3.61	43.55	1.65
2430	-2.85	51.88	2.41
2440	-3.02	49.89	2.39
2450	-2.68	53.95	2.94
2460	-3.21	47.75	2.41
2470	-3.18	48.08	2.7
2480	-3.61	43.55	2.21
2485	-3.65	43.15	2.25
5150	-3.53	44.36	2.64
5250	-3.67	42.95	2.18
5350	-2.88	51.52	3.04
5450	-2.31	58.75	3.13
5550	-1.64	68.55	3.37
5650	-1.65	68.39	3.32
5750	-1.47	71.29	2.99
5850	-1.88	64.86	2.94

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2-2.4 Antenna Passive Test

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See the antenna photo file in the appendix

2-2.5 3D Radiation Pattern

928MHz:

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See the antenna photo file in the appendix

1440MHz:

请见附录天线照片文件

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2450MHz:

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5450MHz:

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3. Physical illustration

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