

APPROVAL SHEET

PCB Antenna

2400~2500 MHz Working Frequency

P/N: RFPCA521010EMABY01

Antenna Type : Dipole

Customer : _____
Approval No. : _____
Issue Date : _____
Production : INPAQ TECHNOLOGY(SUZHOU)
Address : No. 81,Antai Road 1,Xishan Econmic Development Zone, Wuxi
City,Jiangsu Province ,China

*Contents in this sheet are subject to change without prior notice.

品名：RFPCA521010EMABY01

History List

[illegible]

1.Explanation of part number :

RF	PCA	5210	10	E	M	A	B	Y	01
Type Code	Product Code	PCB Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	PCB Antenna	Per 2 digits of length, width e.g.: 5210 Length 52.0 mm, Width 10.0mm	2 digits for cable length e.g.: 10 Cable Length 10.0 cm	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 5: 5 GHz 6: 6GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band M: LTE+Sub-6G+5G LTE : 617~960/1710~2690MHz Sub-6G : 3300~4200MHz 5G : 5150~7150MHz N79 : 4.4~5GHz N: NFC S: UWB(6~7GHz) T:LTE band M:LTE+Sub-6G +5G	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 3:Ø1.13 6:RG316 7:Ø1.37 8:RG178 Y: Ø0.81 Low Loss	01~99 series number

2.Electrical Specification :

Item	Specification
Frequency Range	2400 ~ 2500 MHz
Impedance	50 Ohm Nominal
VSWR	2.0 (Max)
Peak Gain	3.37 dBi
Radiation	Omni-directional
Polarization	Linear Vertical
Admitted Power	1W
Operation Temperature	-20℃ ~ +65℃

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



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : HW

CHECKED BY : HW

DESIGNED BY : Lang

APPROVED BY : Brian

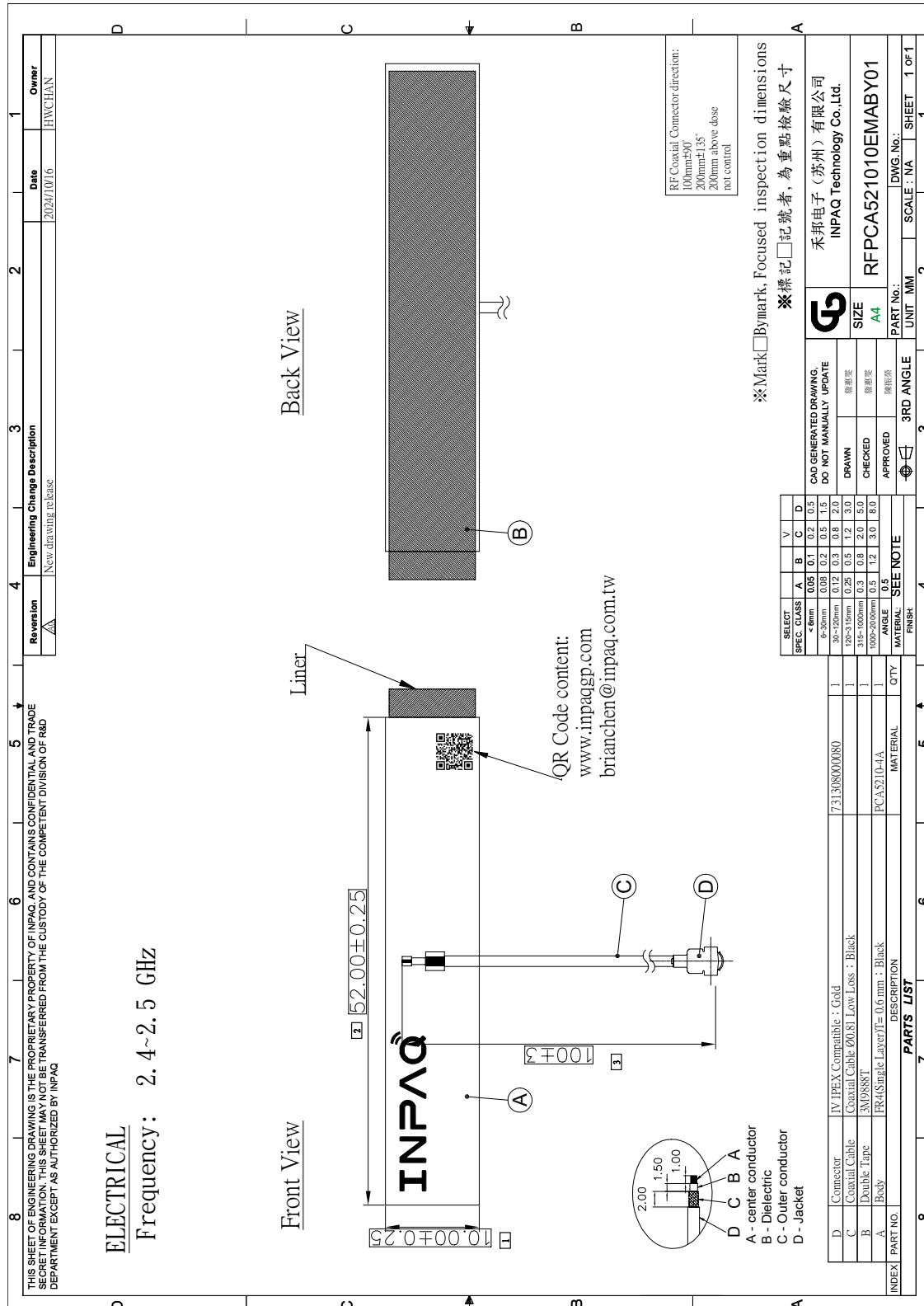
THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : RFPCA521010EMABY01

DOCUMENT NO.

SPEC REV.
A0

3. Antenna Drawing :



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



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : HW

CHECKED BY : HW

DESIGNED BY : Lang

APPROVED BY : Brian

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF
INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED
OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF
APPARATUS OR DEVICES WITHOUT PERMISSION

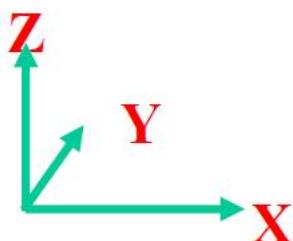
TITLE : RFPCA521010EMABY01

DOCUMENT NO.

SPEC	REV.
A0	

Test Report

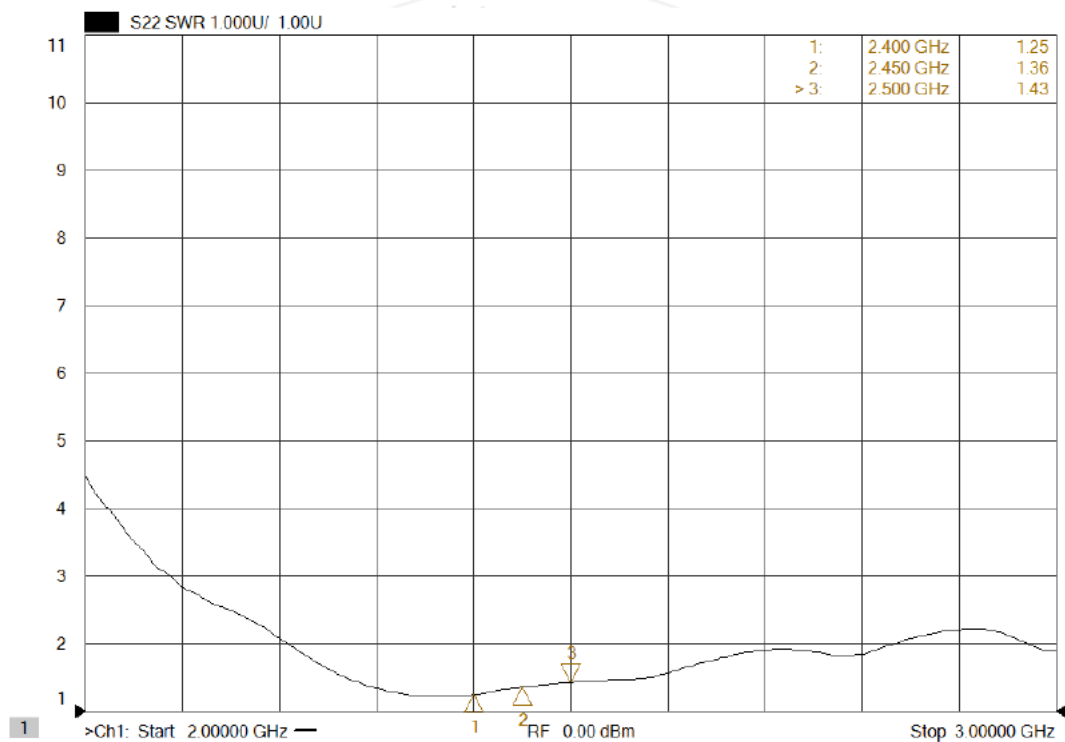
■ ELECTRICAL CHARACTERISTICS



UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A X.X=N/A X.XX=N/A ANGLES=N/A HOLEDIA=N/A			INPAQ TECHNOLOGY CO., LTD.
SCALE : N/A	UNIT : mm		
DRAWN BY : HW	CHECKED BY : HW	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DESIGNED BY : Lang	APPROVED BY : Brian		
TITLE : RFPCA521010EMABY01		DOCUMENT NO.	SPEC REV A0

ELECTRICAL CHARACTERISTICS

VSWR



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



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A UNIT : mm
 DRAWN BY : HW CHECKED BY : HW
 DESIGNED BY : Lang APPROVED BY : Brian

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

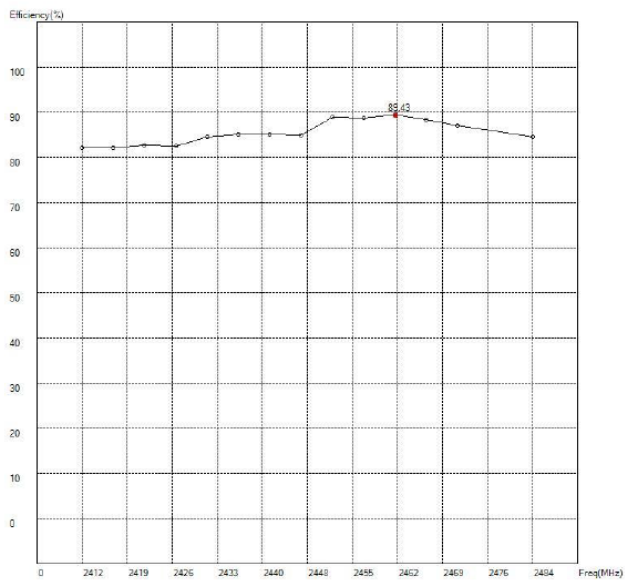
TITLE : RFPCA521010EMABY01

DOCUMENT
NO.

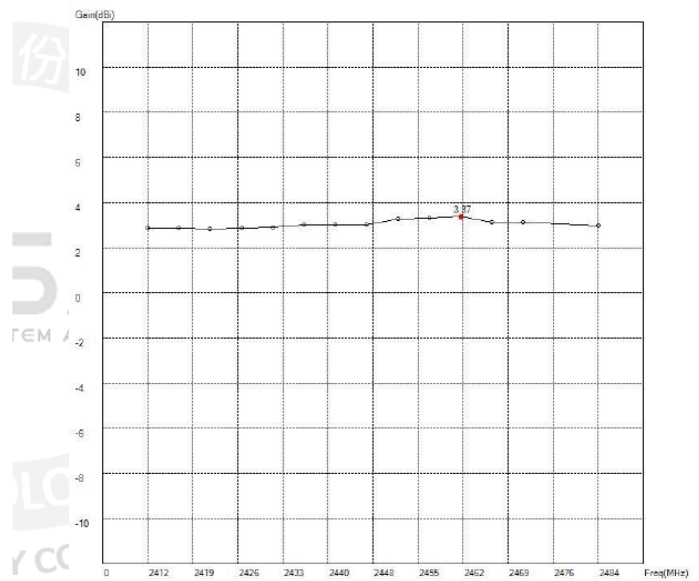
SPEC REV.
A0

Antenna Efficiency & Peak Gain

2400-2500MHz



Maximum Efficiency at 2462 MHz : 89.43%



Peak Gain at 2462 MHz : 3.37dBi

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

SCALE : N/A

UNIT : mm

DRAWN BY : HW

CHECKED BY : HW

DESIGNED BY : Lang

APPROVED BY : Brian

TITLE : RFPCA521010EMABY01



INPAQ TECHNOLOGY CO., LTD.

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

DOCUMENT
NO.

SPEC REV.
A0

Antenna Efficiency and Peak Gain

CH.	Freq (MHz)	Gain (dBi)	Efficiency (%)
1	2412	2.87	82.15
2	2417	2.87	82.20
3	2422	2.85	82.78
4	2427	2.87	82.48
5	2432	2.90	84.46
6	2437	3.02	85.15
7	2442	3.03	85.02
8	2447	3.01	84.82
9	2452	3.26	88.87
10	2457	3.30	88.73
11	2462	3.37	89.43
12	2467	3.13	88.34
13	2472	3.14	87.17
14	2484	2.97	84.52

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



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : HW

CHECKED BY : HW

DESIGNED BY : Lang

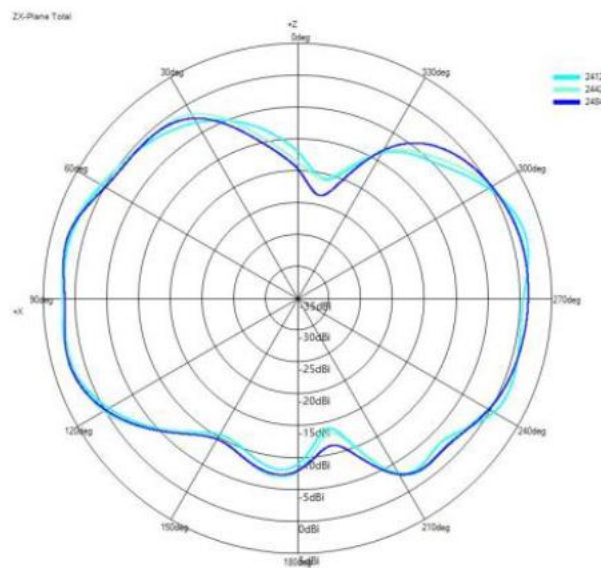
APPROVED BY : Brian

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF
INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED
OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF
APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : RFPCA521010EMABY01

DOCUMENT
NO.

SPEC REV.
A0

RADIATION PATTERN**2400-2500MHz****X-Z Plane****Phi=0.00deg****Gain . dB**

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

**INPAQ TECHNOLOGY CO., LTD.**

SCALE : N/A	UNIT : mm
DRAWN BY : HW	CHECKED BY : HW
DESIGNED BY : Lang	APPROVED BY : Brian

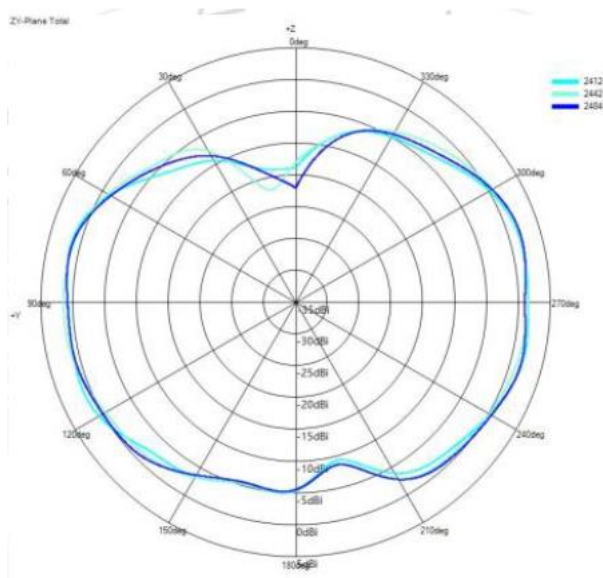
THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : RFPCA521010EMABY01**DOCUMENT
NO.****SPEC REV.
A0**

Y-Z Plane

Phi=90.00deg

Gain . dB

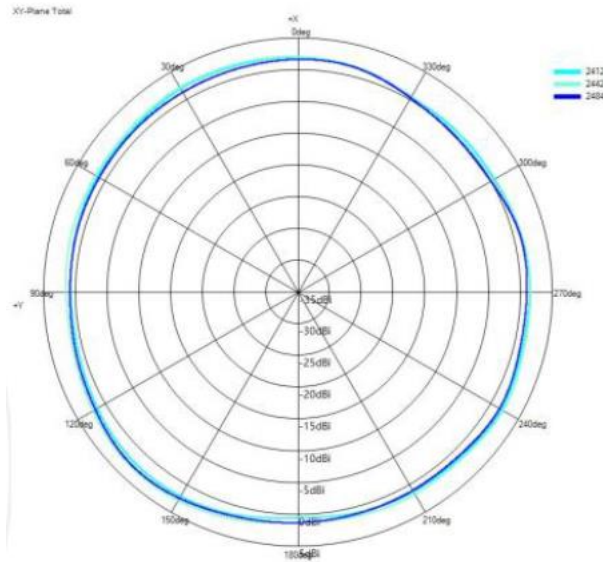


UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A X.X=N/A X.XX=N/A ANGLES=N/A HOLEDIA=N/A			INPAQ TECHNOLOGY CO., LTD.		
SCALE : N/A	UNIT : mm				
DRAWN BY : HW	CHECKED BY : HW	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION			
DESIGNED BY : Lang	APPROVED BY : Brian				
TITLE : RFPCA521010EMABY01		DOCUMENT NO.			SPEC REV.
					A0

X-Y Plane

Theta=90.00deg

Gain . dB



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2412	2. 31	-1. 42	1. 86	-1. 54	2. 20	1. 41
2442	2. 51	-1. 26	1. 71	-1. 35	3. 03	1. 79
2484	2. 53	-1. 31	1. 89	-1. 40	2. 78	1. 32

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



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : HW

CHECKED BY : HW

DESIGNED BY : Lang

APPROVED BY : Brian

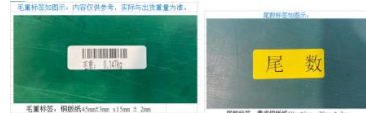
THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF
INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED
OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF
APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : RFPCA521010EMABY01

DOCUMENT
NO.

SPEC REV.
A0

4. Package

RFPCA521010EMABY01 Package	PAGE: 1 之 1			
	Version : A0			
	Revision date : 2024/11/15			
Packaged				
Figure 1				
				
Figure 2				
				
Figure 3				
				
Packaging specifications :				
1. Put every 1pcs of product into a shielding bag and paste the manufacturing label, and seal it with 400pcs per ziplock bag. As shown in Figure 1				
2. Put the foam in the outer box (as shown in Figure 2)				
3. Put the finished product (as shown in Figure 3) into the outer box, put 2000pcs of products in each box, put 1 piece of pearl cotton up and down, see Figure 2				
4. The filling of mantissa boxes refers to this specification "Y-WI-09-281"				
Metal Antenna 370625 RFMTA3706251MAE301 75BI031604 10  -WW0121-031922193619-200 75BI031604 0001 First row: 6-11 digits of model + space + Antenna + space + specification Second row: specification + space + batch number + space + quantity The content of the third row of barcodes: specification + batch number + serial number (the same as the last 4 codes of the fourth row) + quantity (unit is K/PCS) Fourth row: "-" + Printer's number + "-" + Month+Date+Year+Hour+Minute+Second + "-" + "The "Label Number" of the current print + batch number + 4 yards  Label Annotation Ownership (PSA) Huaxin Technology Co., Ltd				
Approval:	He Yaohui	Audit: Zhao Wenbao	Formulate:	Xu Ruonan

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

SCALE : N/A

UNIT : mm

DRAWN BY : HW

CHECKED BY : HW

DESIGNED BY : Lang

APPROVED BY : Brian

TITLE : RFPCA521010EMABY01



INPAQ TECHNOLOGY CO., LTD.

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

DOCUMENT
NO.

SPEC REV.
A0