

WA-P-RFID-02-007(Mantis-US) Specification

1. Application:

RFID UHF Label recognition, Intelligent Transport System, Internet of Things, etc.

2. Explanation of part number :

WA _ P _ RFID _ 02 _ 007
(1) (2) (3) (4) (5)

(1) Product Type: Wireless Antenna

(2) Antenna Type: Quadrifilar Helix Antenna

(3) Material: PCB

(4) Frequency:902~928MHz

(5) Coaxial Cable Type: 02

(6) Suffix: 007

3. Operating Condition:

Temperature	-40	to	70℃
Humidity	10	to	85%RH

4. Storage Condition:

Temperature	-40	to	70℃
Humidity	20	to	65%RH

UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ± 0.2 X.X = ±0.15 X.XX = ±0.15

ANGLES = ±1

HOLEDIA = ±0.1



佳邦科技股份有限公司
INPAQ TECHNOLOGY CO., LTD.

SCALE : /

UNIT : mm

DRAWN BY: 张涛

CHECKED BY: 李志强

DESIGNED BY: 刘小孟

APPROVED BY: 唐龙

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5. Electrical Specification :

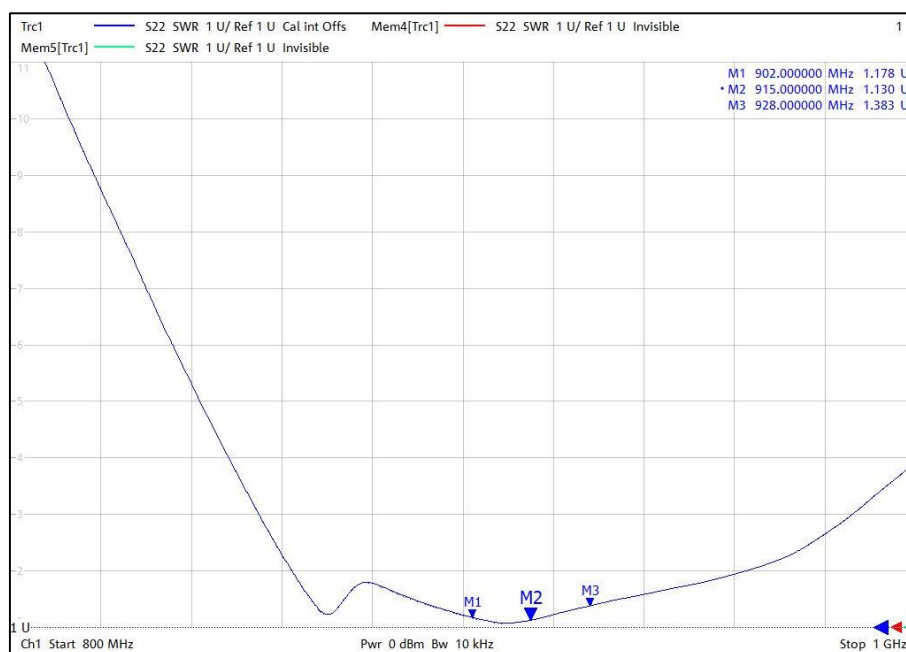
ITEM	SPECIFICATION
Frequency Band	902~928MHz
VSWR	< 2
Polarization	RHCP
Peak Gain	≥ 3 dBic
Average Efficiency	> 65%
Impedance	50 Ω Typ.

6. Electrical Characteristics :

Antenna is tested in customer device. Device photo please refer to chapter 9 product photo.

6.1—VSWR

Mark	Frequency	VSWR
1	902 MHz	<2
2	915 MHz	<2
3	928 MHz	<2



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6.2 Antenna Passive Test Result

Frequency (MHz)	Peak Gain Theta (dBiL)	Peak Gain Phi (dBiL)	Peak Gain RHCP(dBiC)	Efficiency (%)	AR(dB)
902	-1.26	0.12	2.47	65.15	1.39
903	-0.94	0.12	2.62	66.72	1.06
904	-0.62	0.13	2.77	68.08	0.76
905	-0.35	0.15	2.91	69.22	0.54
906	-0.36	-0.07	2.79	70.22	0.43
907	-0.12	-0.03	2.93	70.93	0.45
908	0.07	0.01	3.05	71.61	0.53
909	0.23	0.03	3.13	72.20	0.67
910	0.38	0.03	3.21	73.08	0.82
911	0.44	0.01	3.22	73.36	0.98
912	0.51	-0.06	3.23	73.91	1.15
913	0.58	-0.11	3.24	74.30	1.30
914	0.63	-0.15	3.24	74.35	1.48
915	0.68	-0.21	3.23	74.45	1.67
916	0.38	-0.22	3.05	74.37	1.84
917	0.43	-0.23	3.07	74.37	2.03
918	0.77	-0.59	3.09	74.44	2.21
919	0.66	-0.47	3.06	74.33	2.39
920	0.66	-0.48	3.04	74.17	2.57
921	0.98	-0.99	3.01	74.21	2.77
922	0.94	-0.94	2.98	74.22	2.98
923	0.89	-1.04	2.98	74.17	3.13
924	0.84	-0.70	2.99	74.06	3.33
925	0.85	-0.64	3.00	73.66	3.53
926	1.24	-1.70	2.79	73.49	3.71
927	1.27	-1.75	2.80	72.94	3.90
928	1.46	-2.04	2.80	72.67	4.07

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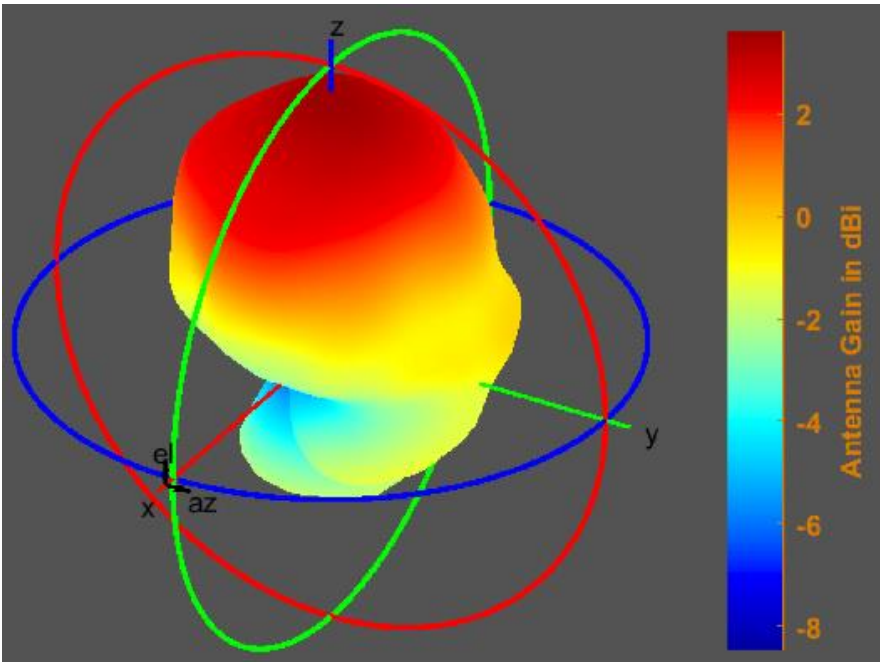
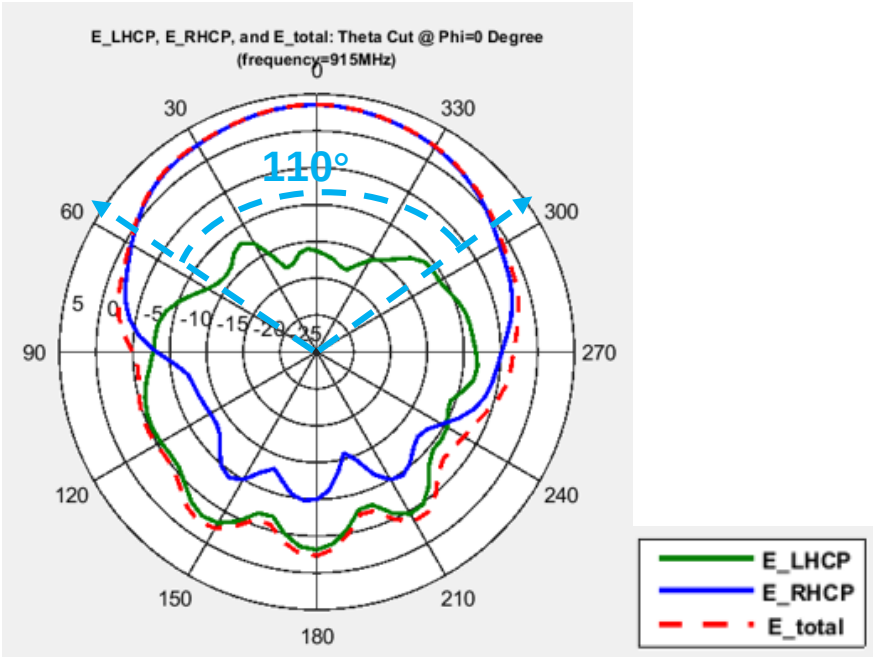
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7. Antenna-915MHz-2D/3D



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