

CUSTOMER

7

Document No.: ENS000102880

Approval Sheet Rev.: A4

Spec. Rev. : P3

APPROVAL SHEET

/Product Model
No. : **DIPOLE ANTENNA 2T2R RSMA**

/Customer No. : **14008-02650000**

/ Issue Date :

/ Approved Date : **2019/11/29**

Approved by customer: (signing or stamping here)



INPAQ TECHNOLOGY CO., LTD.

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DAM-J7-H-DB-800-10-34 Specification

1. Explanation of part number :

DAM - J7 - H - DB - 800 - 10 - 34
(1) (2) (3) (4) (5) (6) (7)

(1) Product type :DAM

(2) Appearance Series : J7

(3) Frequency :H

(4) Coaxial Cable Specification :DB, Double Cable Black

(5) Coaxial Cable Length:800mm

(6) Connector Types:10,SMA RP PLUG

(7) Suffix for special requirements :34 ,WIFI MiMo

2. Electrical Specification :

2-1. Frequency Band:

Frequency Band	MHz
WIFI 2450/5400	2400-2500;5100-5900

2-2. Impedance

50 ohm nominal

2-3 Matching circuit

Antenna Type	DIPOLE Antenna for WIFI 802.11a/b/g/n		
Connector Type	SMA RP PLUG		
Cable Type	OD 1.37 RF Double Cable		
Transit Cable Type	RP SMA Jack Transit IPEX MHF4 0.81 BK		
Impedance	50Ω		
Polarization	Linear		
Radiation Pattern	Omni-directional		
Frequency Range	WLAN 802.11a/b/g/n	2.4-2.5GHZ ;	5.1-5.9GHZ
VSWR		≤2.5	≤2.5
Antenna Cable Loss/M	2.4-2.5GHz	2.2 ± 0.5dB	
	5.15-5.85 GHz	4.0 ± 0.5dB	
Highest Peak Gain With cable loss(dBi)	2.4-2.5GHz	1.5 ± 0.5 dBi	5.15-5.47 GHz 1.0 ± 0.5 dBi
	5.47-5.725GHz	0.5 ± 0.5 dBi	5.725-5.85GHz 0.0 ± 0.5 dBi
Cable total Length/Color	800 mm Color Black		
Operation Temperature	-20 °C ~ +60°C		
Storage Temperature	-20 °C ~ +65°C		

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X ± X.X ± X.XX ±

ANGLES ± HOLEDIA ±



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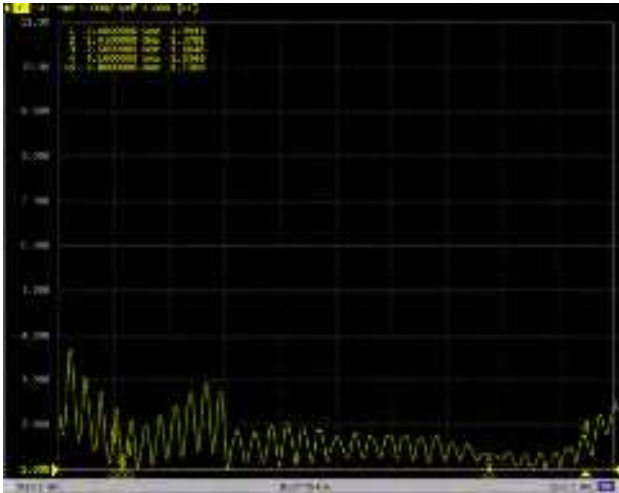
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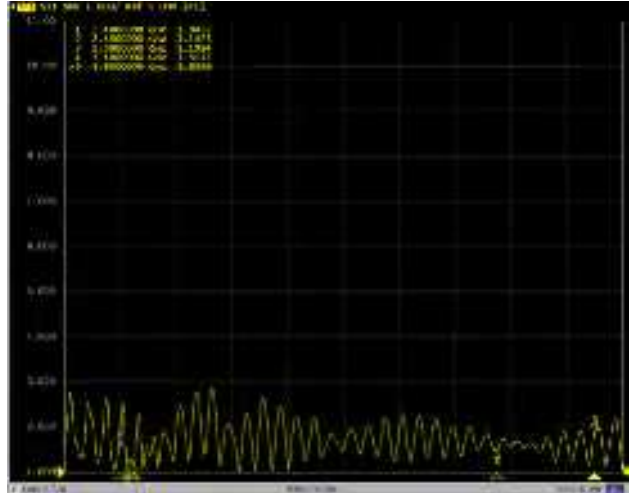
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2-4. VSWR (Facing the logo “ASUS”)

Frequency(MHz)		2400	2450	2500	5100	5800
VSWR	Antenna (Up)	≤2.5	≤2.5	≤2.5	≤2.5	≤2.5
	Antenna (Down)	≤2.5	≤2.5	≤2.5	≤2.5	≤2.5



Antenna Up



Antenna Down

2-5. Efficiency and Gain Pattern

Instruments: Anechoic Chamber, Network Analyzer, Quarter Ridge Horn Antenna.

Chamber description:

1. The anechoic chamber satisfied a far-field measurement system condition with size of 8m *4m*4m.
2. The Probing antenna is a Quarter Ridge Horn Antenna which is placed in the one side of chamber And the AUT is placed in the other side of the chamber.
3. The antenna under test is fixed on a step rotator. We can control the rotating angle for accurate or rough measurement.

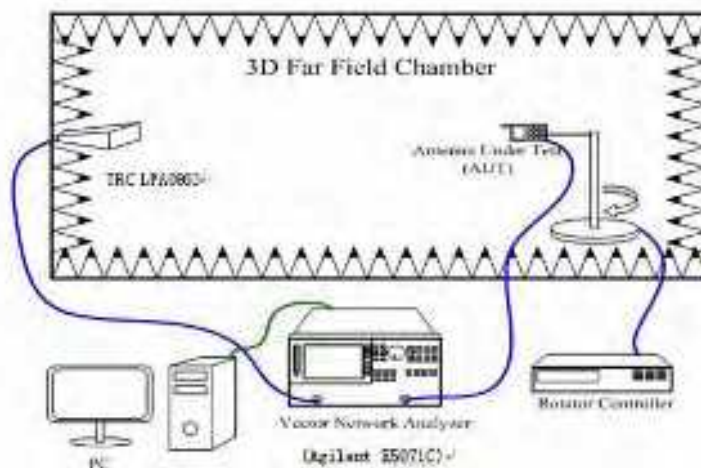


Fig. 1 shows the interior components of Anechoic chamber

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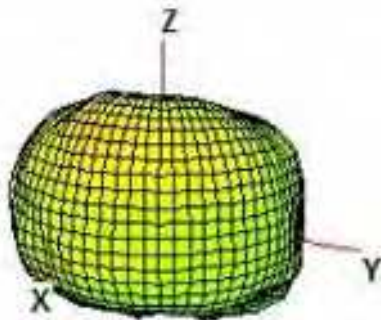
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2-5-1 Efficiency & Gain (dBi)

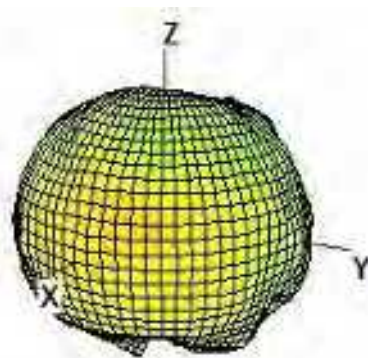
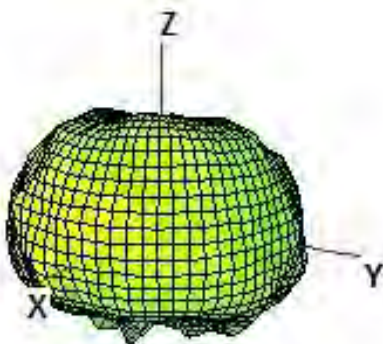
Frequency (MHZ)	Main Antenna		Aux Antenna	
	Efficiency (%)	Peak Gain (dBi)	Efficiency (%)	Peak Gain (dBi)
2400	45.25	1.52	46.25	1.65
2450	46.56	1.64	45.33	1.25
2500	44.69	1.47	44.35	1.49
5100	34.76	1.05	34.12	1.02
5200	34.74	1.15	34.08	1.12
5300	33.99	1.02	33.65	1.04
5400	32.29	0.93	31.87	0.92
5500	30.28	0.56	30.25	0.65
5600	28.68	0.35	28.56	0.41
5700	28.25	0.26	28.95	0.35
5800	27.68	0.07	28.25	0.11

2-5-2 3D Gain pattern

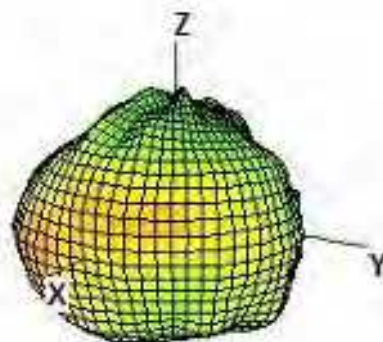
Main Antenna



2400MHz



2450 MHz



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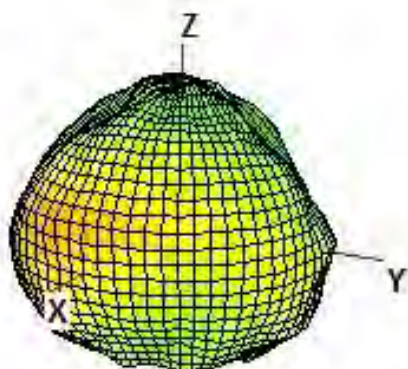
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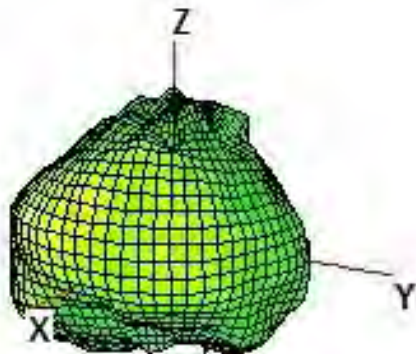
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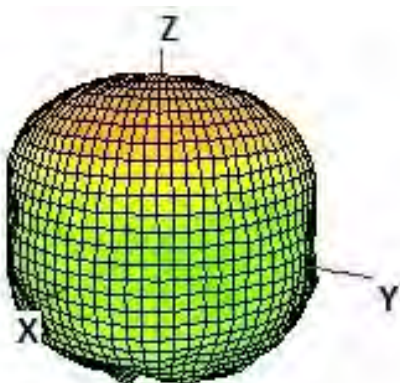
2500MHz



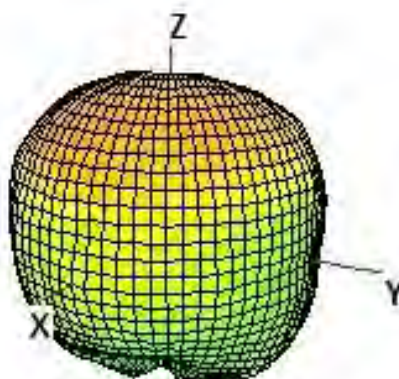
5100MHz



5400MHz

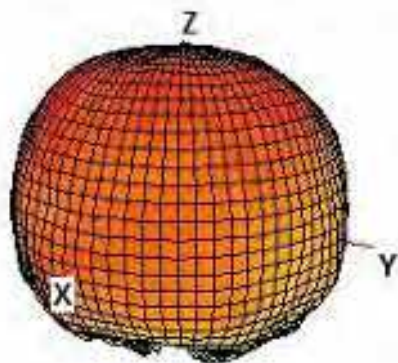


5800MHz

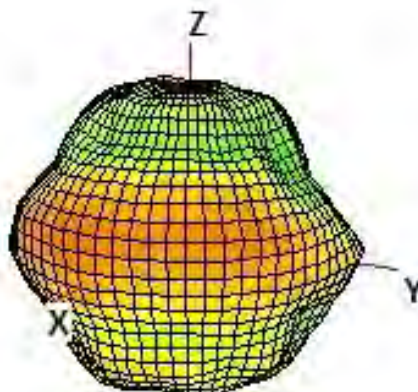


Aux Antenna

2400MHz



2450 MHz



2500 MHz

5100 MHz

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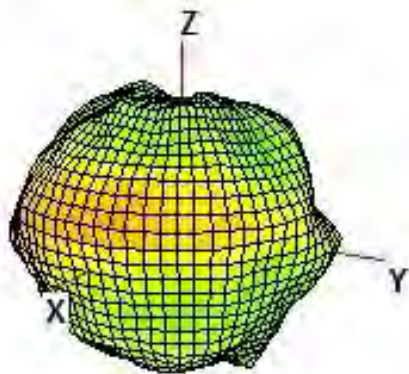
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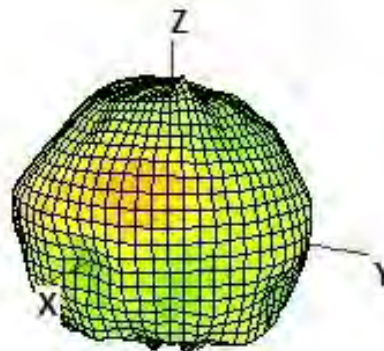
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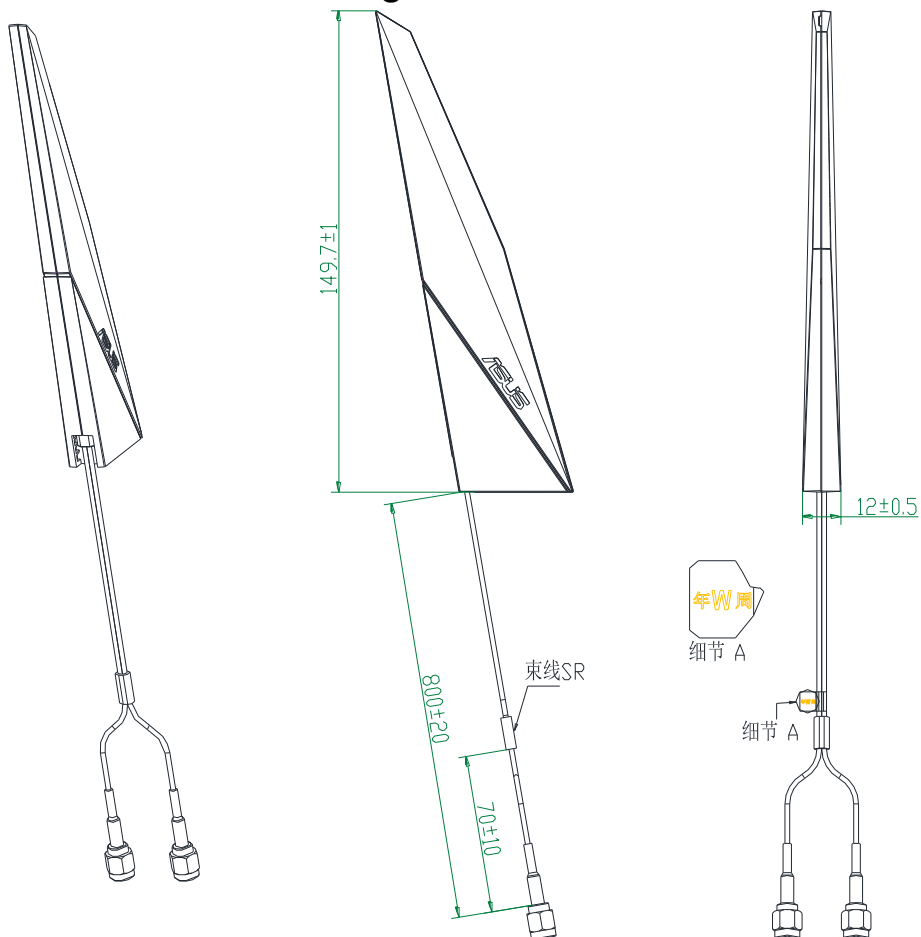
5400 MHz



5800 MHz

3. Mechanical Specification:

3-1-1 The antenna drawing



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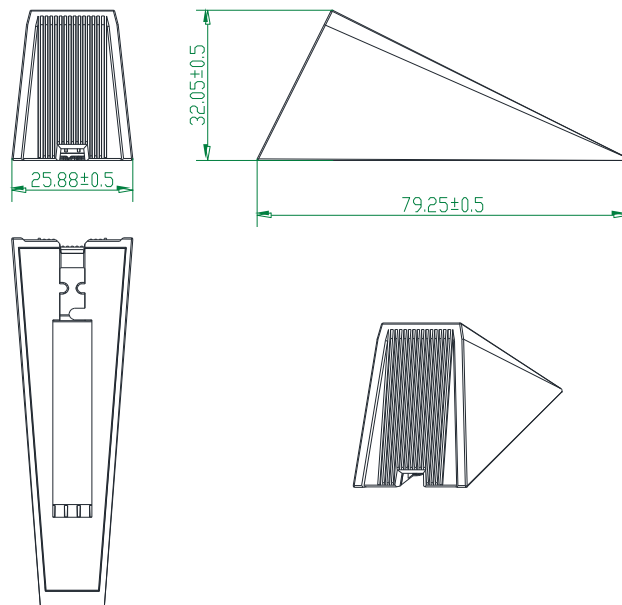
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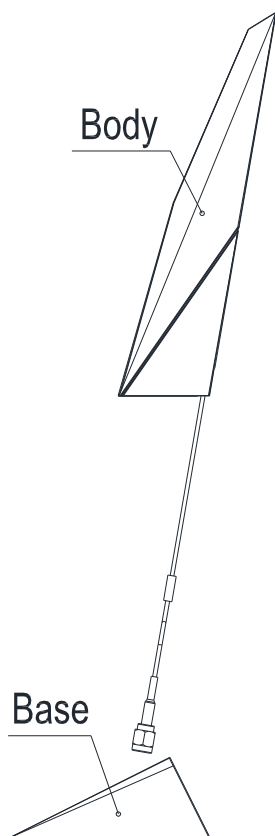
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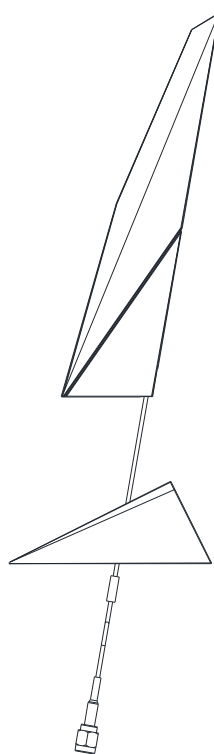


3-1-2 Assemblage diagram

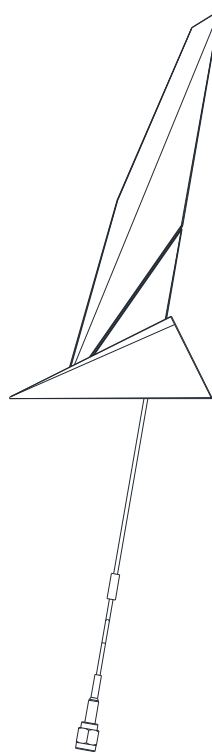
STEP 1



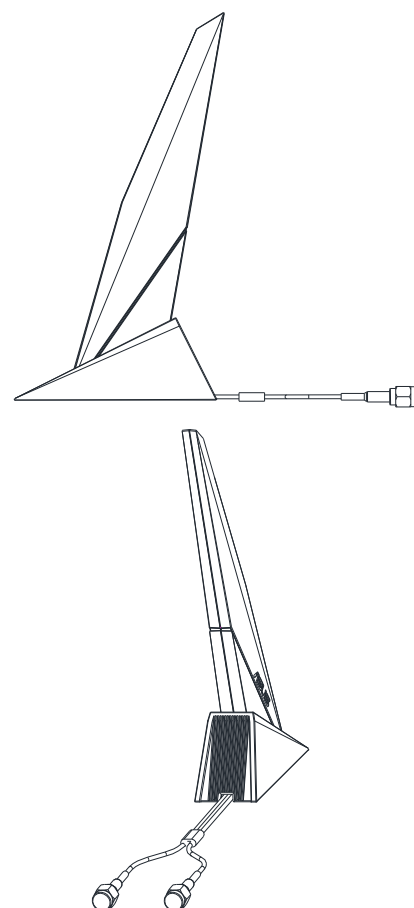
STEP 2



STEP 3



STEP 4



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3-2 The antenna Picture



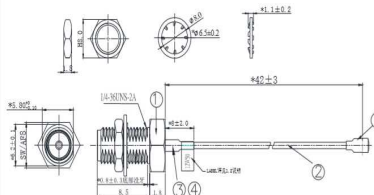
3-3 The ipex cable



CNC SMA Jack 0.81 BK 42mm

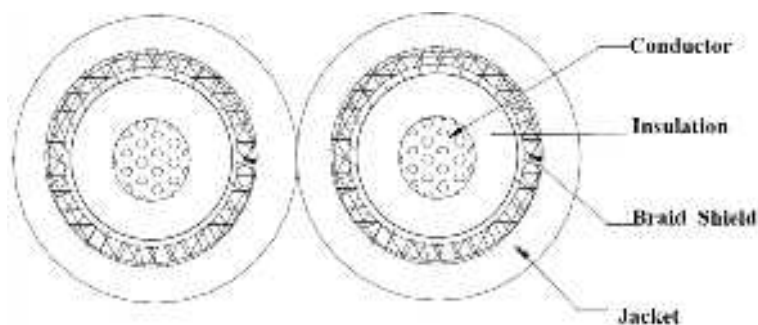
1. Appearance dimension (Unit : mm) :

1.1 尺寸图



3-4. CABLE Specification

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Conductor 導體	Material(材質)	---	Silver Plated Copper Wire
	Filler (填充)	---	-----
	Construction(結構)	No./mm	7/0.102±0.008
	Stranded diameter(絞合外徑)	mm	0.306
Insulation 絕緣	Material(材質)	---	PEP
	Nom. Thickness(厚度)	mm	0.28
	Diameter(線徑)	mm	0.92±0.05
	Color(顏色)	---	Nature
Braid Shield 編織	Material(材質)	---	Tinned Copper Wire 16/5/0.05±0.008
	Coverage(遮蔽率)	%	85% ↑
Jacket 外被	Material(材質)	---	NHPE
	Nom. Thickness(厚度)	mm	0.22
	O.D(外徑)	mm	1.60±0.10*3.20±0.15
	Color(顏色)	---	Black

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DAM-J7-H-DB-800-10-34 MATERIAL LIST

ITEM	DESCRIPTION	MATERIAL & TYPE & SIZE	COLOR	Q'ty
1	CAS BASE DOWN	TN3713B (ABS+PC)	BLACK	1
2	CAS BASE UP	TN3713B (ABS+PC)	BLACK	1
3	CAS ANT R	TN3713B (ABS+PC)	BLACK	1
4	CAS ANT L	TN3713B (ABS+PC)	BLACK	1
5	PCB ANT	FR4 43.5x10.5x0.4mm	GREEN	2
6	ADHESIVE TAPE	G9000 43x10x0.15mm	COLORLESS	2
7	Tap Sponge	EVA+3M6408 28.5x15x1.3mm	BLACK	1
8	Clump weight	SPCC 29.5x25x3mm	SILVER WHITE	1
9	Magnet N35	N35 Nd-Fe-B NI:min 6um,Cu:min 7um 20x4x1.95mm	SILVER WHITE	1
10	SR Outlie 2t2r	SILICON 8.5x6x3.6mm	BLACK	1
11	SR Fixing Cable	SILICON 10x4.8x3.3mm	BLACK	1
12	Cable	DOUBLE CABLE 1.37 925mm	BLACK	1
13	SHRIK TUBE	SHRIK TUBE OD3.5x20mm	BLACK	2
14	CONN SMA	SMA R/P PLUG, BODY C3604 MIN1u AU PLATING; MIN 80u NI PLATING ; MIN 100u CU PLATING ; INSULATOR:PTFE	GOLDEN	2

