

SPECIFICATION FOR APPROVAL

CUSTOMER: _____

CUS PARTNO: _____

PARTNAME: _____ External antenna

TPTPART NO: _____ WWXL6012350

VERSION: _____ 1.0

CUS STAMP:

DATE:

Purchasing Dept	Engineering Dept	Approval

WWXL:

Date: January 30, 2026

Engineering Dept	Sales Dept	Approval
Dai Hongbo		Tong Xiaoyan



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All things connected Communication Xiangyang Co.,Ltd.

Please return one specification or one copy of it with your chop and signature of approval and retain the others for your record. In the event of an order being placed for this part number before the chop and signed with specification (or copy) is returned and without special explanation, it will be assumed that full approval have been given.

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Add: Hubei Xiangyang Gucheng County 1-3 Shuang Yang Road Taoyuan Street, All things connected industrial park,

Cell phone: 136 6268 4409

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Specification for Antenna

1、Product pictures(For reference only)



2、Test parameters

Name: WIFI antenna (WWXL6012350)		ModelType	
ELECTRICAL SPECTFICATIONS		MECHANICAL SPECTFICATIONS	
FrequencyRange 2400-2500/5150-5850MHz		Dimensions	40. 27*28. 41*0. 2mm
Impedance	50 Ω	IPEX	IPEX
VSWR	Reference standing wave diagram	Coaxial-cable	RG1.13 black L=110 $\pm$ 2mm
Gain	3.39/7.25dBi	WorkingTemperature	-45 $^{\circ}$ C - +85 $^{\circ}$ C
Polarization	linear Vertical	Limit Temperature	-45 $^{\circ}$ C +85 $^{\circ}$ C
Radiation	Omnidirectional		

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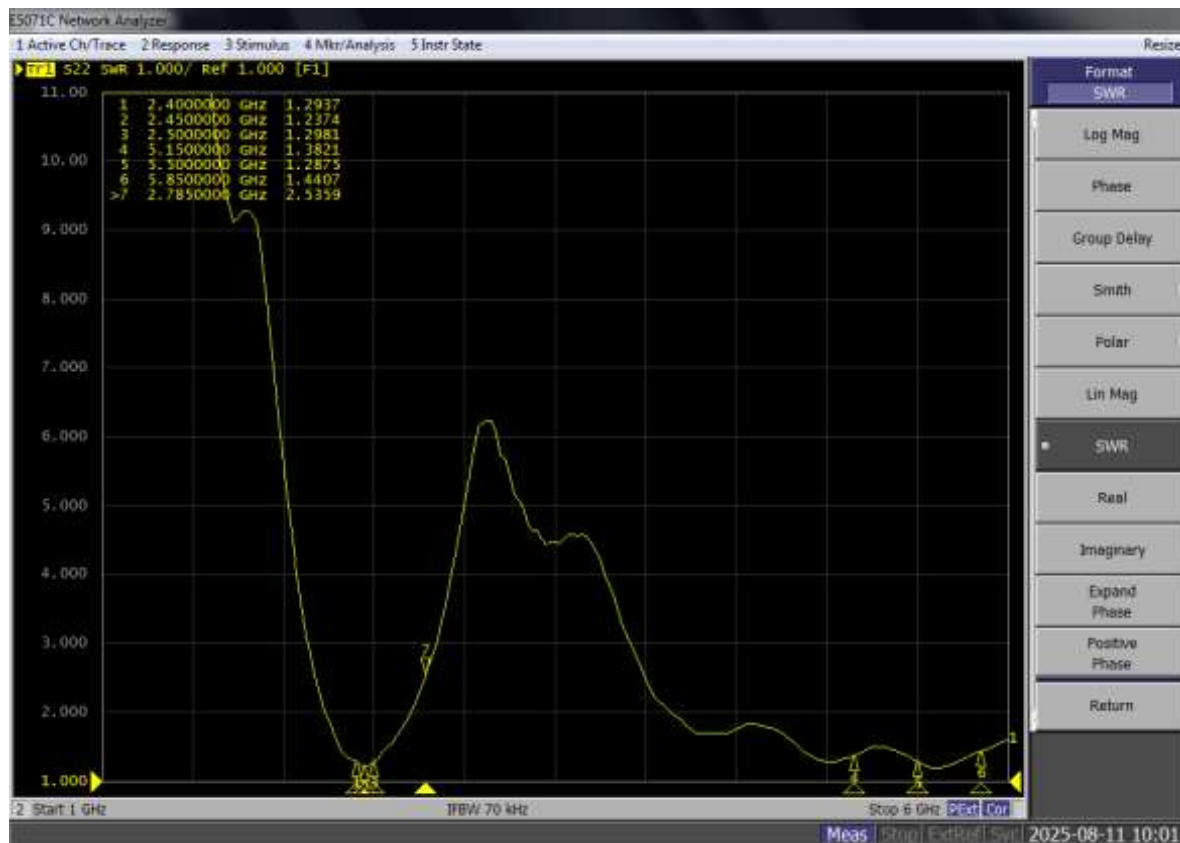
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3、Antenna Passive Parameters:

a. VSWR



b. Gain and Efficiency:

Gain&Efficiency&PhaseCenter								
frequency (MHz)	gain (dBi)	efficiency (%)	frequency (MHz)	Gain (dBi)	Efficiency (%)	frequency (MHz)	Gain (dBi)	efficiency (%)
2400	2.8	54.2	5150	6	44.87	5700	7.21	44.67
2410	2.76	53.7	5200	6.06	44.36	5750	7.18	44.26
2420	2.88	52.97	5250	5.9	44.67	5800	7.07	43.55
2430	2.78	52.84	5300	6.05	43.95	5850	7.25	42.95
2440	2.89	56.49	5350	6.36	43.65			
2450	3.1	59.7	5400	6.5	42.95			
2460	3.16	60.53	5450	6.54	43.15			
2470	3.22	58.88	5500	6.58	43.65			
2480	3.3	57.81	5550	6.67	43.95			
2490	3.34	58.75	5600	7.04	44.26			
2500	3.39	62.52	5650	7.17	44.57			

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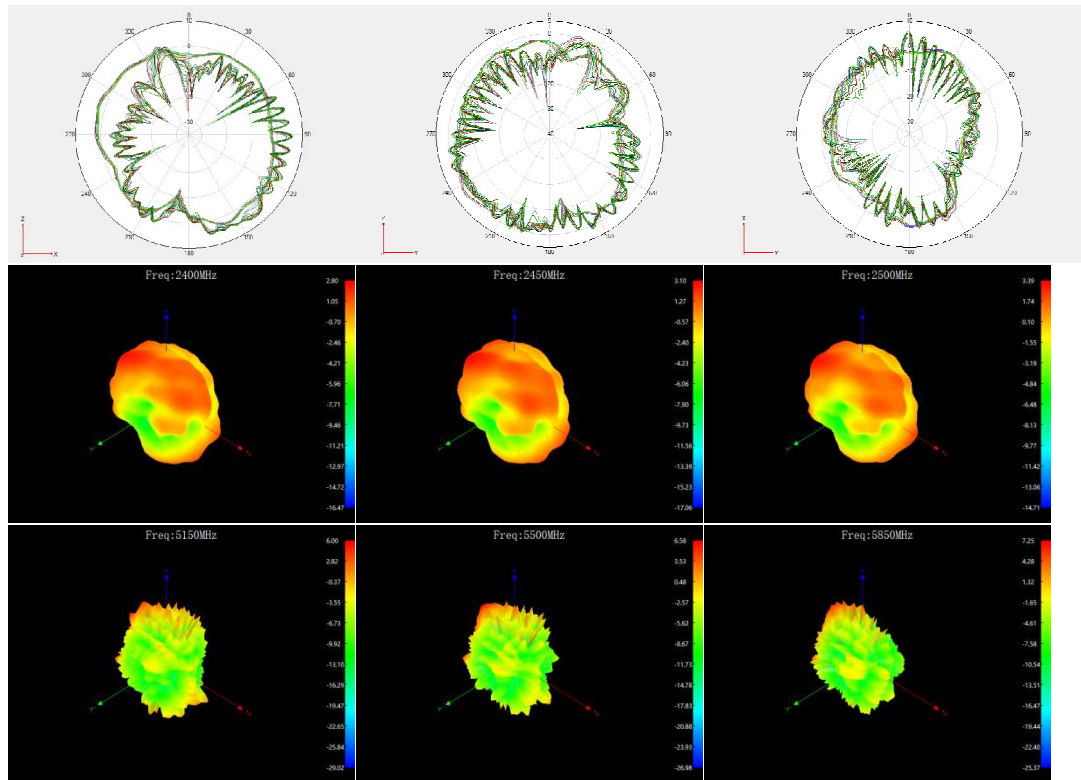
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c、2D/3D directional



d. Active data::

Item	Tester	Measurement	Azimuths	Elevations	Standard	Band	Channel	Frequency	MaxValue	Total	Test time	End time
1	Cmw500	TRP	Every30	AllProbes	WIFI_B	B_11M	1	2412	17.95	11.04	6' 14"	25/10/22 星期三 14:52:26
2	Cmw500	TRP	Every30	AllProbes	WIFI_B	B_11M	6	2437	17.83	11.64	4' 13"	25/10/22 星期三 14:56:53
3	Cmw500	TRP	Every30	AllProbes	WIFI_B	B_11M	13	2472	19.41	13.2	4' 11"	25/10/22 星期三 15:01:17
4	Cmw500	TRP	Every30	AllProbes	WIFI_B	B_11M	11	2462	18.93	12.45	4' 10"	25/10/22 星期三 15:05:40
5	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_B	B_11M	1	2412	-89.05	-82.41	2' 58"	25/10/22 星期三 15:08:52
6	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_B	B_11M	6	2437	-88.38	-82.26	2' 24"	25/10/22 星期三 15:11:27
7	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_B	B_11M	13	2472	-90.57	-84.18	2' 3"	25/10/22 星期三 15:13:41
8	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_B	B_11M	11	2462	-89.72	-83.45	2' 4"	25/10/22 星期三 15:15:58
9	Cmw500	TRP	Every30	AllProbes	WIFI_G	G_6M	1	2412	19.51	12.45	3' 47"	25/10/22 星期三 15:20:54
10	Cmw500	TRP	Every30	AllProbes	WIFI_G	G_6M	6	2437	19.33	13.19	4' 10"	25/10/22 星期三 15:25:17
11	Cmw500	TRP	Every30	AllProbes	WIFI_G	G_6M	13	2472	20.99	14.75	3' 59"	25/10/22 星期三 15:29:30
12	Cmw500	TRP	Every30	AllProbes	WIFI_G	G_6M	11	2462	20.47	14.07	4' 12"	25/10/22 星期三 15:33:56
13	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_G	G_54M	1	2412	-75.21	-68.31	1' 59"	25/10/22 星期三 15:36:09
14	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_G	G_54M	6	2437	-74.72	-68.81	2' 54"	25/10/22 星期三 15:39:14
15	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_G	G_54M	13	2472	-76.12	-70.12	3' 8"	25/10/22 星期三 15:42:33
16	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_G	G_54M	11	2462	-76.69	-69.99	1' 59"	25/10/22 星期三 15:44:43
17	Cmw500	TRP	Every30	AllProbes	WIFI_N	N_MCS7	1	2412	19.6	12.42	3' 50"	25/10/22 星期三 15:49:43
18	Cmw500	TRP	Every30	AllProbes	WIFI_N	N_MCS7	6	2437	19.07	12.98	4' 14"	25/10/22 星期三 15:54:11
19	Cmw500	TRP	Every30	AllProbes	WIFI_N	N_MCS7	13	2472	20.88	14.67	4' 10"	25/10/22 星期三 15:58:35
20	Cmw500	TRP	Every30	AllProbes	WIFI_N	N_MCS7	11	2462	20.39	14.07	3' 49"	25/10/22 星期三 16:02:38
21	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_N	N_MCS7	1	2412	-71.85	-65.13	4' 15"	25/10/22 星期三 16:07:08
22	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_N	N_MCS7	6	2437	-71.57	-65.17	1' 53"	25/10/22 星期三 16:09:12
23	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_N	N_MCS7	13	2472	-73.1	-66.66	3' 9"	25/10/22 星期三 16:12:32
24	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_N	N_MCS7	11	2462	-73.19	-66.62	2' 13"	25/10/22 星期三 16:14:55
25	Cmw500	TRP	Every30	AllProbes	WIFI_A	A_6M	36	5180	21.68	13.37	3' 46"	25/10/22 星期三 16:19:14
26	Cmw500	TRP	Every30	AllProbes	WIFI_A	A_6M	100	5500	19.79	12.5	4' 13"	25/10/22 星期三 16:23:40
27	Cmw500	TRP	Every30	AllProbes	WIFI_A	A_6M	165	5825	20.48	11.78	4' 14"	25/10/22 星期三 16:28:08
28	Cmw500	TRP	Every30	AllProbes	WIFI_A	A_6M	161	5805	20.6	11.93	3' 55"	25/10/22 星期三 16:32:17
29	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_A	A_54M	36	5180	-77.76	-70.27	2' 49"	25/10/22 星期三 17:01:39

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30	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_A	A_54M	100	5500	-74.98	-67.55	2' 2"	25/10/22 星期三 17:03:51
31	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_A	A_54M	165	5825	-75.54	-67.64	1' 59"	25/10/22 星期三 17:06:02
32	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_A	A_54M	161	5805	-76.43	-67.59	3' 27"	25/10/22 星期三 17:09:39
33	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_N	N_MCS7	36	5180	-75.23	-67.25	1' 48"	25/10/22 星期三 17:18:31
34	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_N	N_MCS7	100	5500	-72.72	-65.49	2' 20"	25/10/22 星期三 17:21:02
35	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_N	N_MCS7	165	5825	-72.18	-64.32	2' 17"	25/10/22 星期三 17:23:32
36	Cmw500	TIS with EIRP	Every30	AllProbes	WIFI_N	N_MCS7	161	5805	-72.94	-64.28	3' 53"	25/10/22 星期三 17:27:35
37	Cmw500	TRP	Every30	AllProbes	WIFI_N	N_MCS7	36	5180	21.45	13.75	4' 13"	25/10/22 星期三 17:31:59
38	Cmw500	TRP	Every30	AllProbes	WIFI_N	N_MCS7	100	5500	20.83	12.62	3' 47"	25/10/22 星期三 17:53:57

4、Product characteristics

- Choose high-quality FPC and radio frequency cable, self-attenuation;
- Stable performance, long life;
- The standing wave in frequency band is good.

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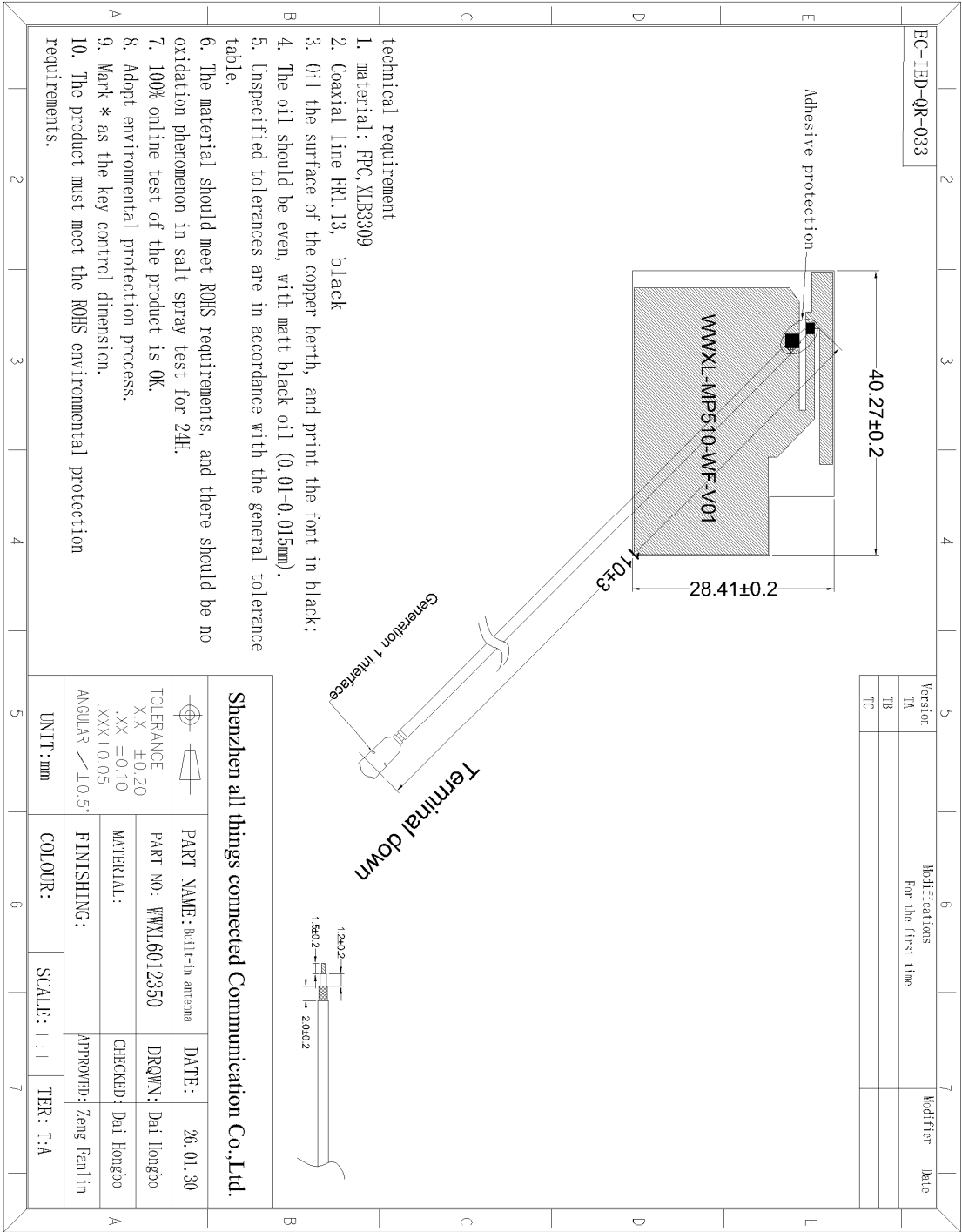
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5、Drawing

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6、Reliability testing

a、Environmental experiment

High and low temperature and humidity test report						
test project	High temperature, low temperature and constant humidity test					
name	External antenna (WWXL6012350)			date	2026.01.30	
device	Constant temperature and humidity test box network analyzer			Quantity	5PCS	
Inspectin standards	1. There are no defects such as peeling off, cracks, wrinkles, etc. on the metal surface; non-metal parts must not have defects such as discoloration, cracking, deformation, degumming. 2. The electrical test meets the design requirements; the voltage standing wave ratio test is satisfactory.					
Test name		request	experiment method	Actual test data	result	
					sample	Assessm ent result
High temperature test	Temperature (°C) Test sample temperature stabilization time (H) Test duration (h) Recovery time (h)	+85±3 1 2 1	9 according to GB2423. 1-89 Method	+87 1.2 2.3 1	1	qualified
					2	qualified
					3	qualified
					4	qualified
					5	qualified
Low temperature test	Temperature (°C) Test sample temperature stabilization time (h) Test duration (h) Recovery time (h)	-45±3 1 2 1	8th in accordanc e with GB2423. 1-89 Method	-46 1.2 2.4 1.1	1	qualified
					2	qualified
					3	qualified
					4	qualified
					5	qualified
Constant Damp Heat Test	Temper ature (°C) Relative humidity (%)	+40±2 90-95 21 1	According to GB2423. 3-93 Section 5 Method	+42 92 22 1.1	1	qualified
					2	qualified
					3	qualified
					4	qualified

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	Test duration (h) Recovery time (h)				5	qualified
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b. Salt spray test

Salt fog test report				
Test item	Salt spray test			
Name	External antenna (WWXL6012350)		date of observation	2026.01.30
Device name	Salt spray corrosion test box		Test quantity	5 PCS
Test method	The test samples were put into the modulated salt solution test chamber and salt spray corrosion chamber for continuous spray test			
Salt solution concentration	52g/L	PH Value of Salt Solution: 6.5-7.2		Test cycle: 24h
Actual test data	55g/L	PH Value of Salt Solution: 6.8		Test cycle: 26h
Test standard	Tests were carried out according to GB/T10125 "Artificial Atmosphere Corrosion Test and Salt Spray Test"; Results According to GB/T6461-2002 "Metal and other inorganic coatings on metal substrates after corrosion test are samples and specimens"			
Test result				
NO	Corrosion resistance grade	Actual test data	Assessment result	Remarks
1	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
2	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
3	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
4	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
5	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	

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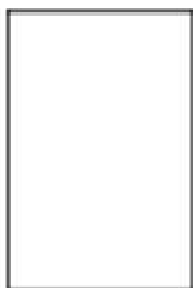
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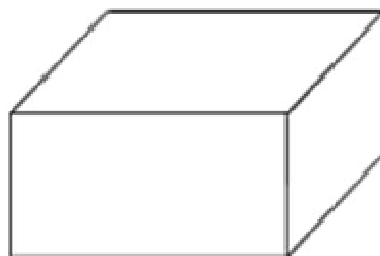
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7. Packing instructions



100PCS/Pouch



30Pouch/1Caron