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copyright © 2023 iHè

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È nHÀpK~%yyK± YĖBßÄgÖ

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 $\pm \tilde{N}$

INDEX

组内成员自由

$$9D\} \hat{U} = \hat{U} \hat{H} \hat{U}^\dagger = \hat{U} P \hat{U}$$

Äg'w'óž

16-01-2020 10:00:00

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z iHè <https://www.ruijie.com.cn>

z iHè <https://www.ruijie.com.cn/fw/>

z iHè 7*24h <https://ocs.ruijie.com.cn>

z iHè 7*24h 4008-111-000

z iHè 4i: http7*24h

2. ý

APB

D ě



1 C| Ė

1.1 cĤ

MPk 2.0 @ă Ė@ſ)k+Ĥ]Ĥ[ĤECſ]BĤPĖ 10k+ĤN@7-
 Ė1yLNĖ 6Ĥ' â k+Ĥ+X@ă ĖĂ

@ăL@ſ APĂ APDĂNĂ561yZ&Ĥ AP 7 48 ZĤ Ĥ RFID 4NĂQĖ
 RFID Ĥ-Ė APD Ĥ@Ĥ APĖ 5G NĖĤ@7-Ĥ0=Ă 1F61yGj&Ė 9
 >06ĤNĖ ĤuL&ĤH&Ă

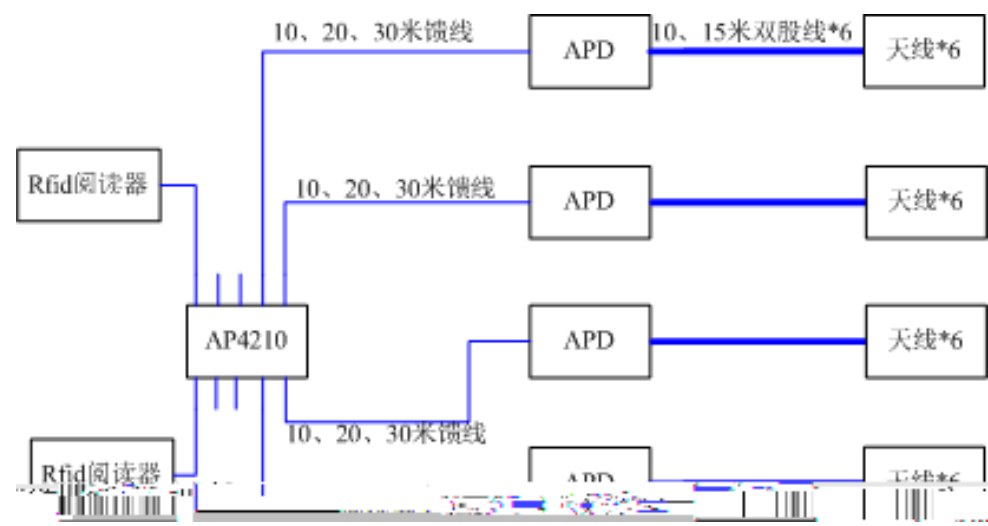
@ă+a4&4ô @Ö

RG-AP4210Ö M&%[Ĥ@ăC+X AP A7Ė G+X 802.11N APĖ 1 NĂ ĖN@7-ĖMW,4Ö
 &ô Ĥ

RG-APD-MÖĤs,w4× (xĖ>| AP

z RG-IOA-2505-S1Ö. D ¼× G½8 APD-S ½X ×

. 1-1 k+½M&%½ V2.0 @ã 4½½?



1.2 ½½] Ö”

1.2.1 RG-AP4210

1.2.1.1 RG-AP4210 C½

½	RG-AP4210
4½½	

PEÄ½ D. ½½

	JiA7M0ŕĖĖĖ AP 1F_ af,†eGŕ
1ŕ61	1 Z console
4Nŕ	8 Z5ŕNÁ +2 Z RFID 4NÁ
+eŕ	1 PoE ZĖĖ 802.3af QĖĖĂ
ŕĖ	802.11b/g/nŕ 2.4GHz-2.4835GHz ŕĂ
B3f_	OFDMŕ BPSK@6/9MbpsĖ QPSK@12/18MbpsĖ 16-QAM@24MbpsĖ 64-QAM@48/54Mbps DSSSŕ DBPSK@1MbpsĖ DQPSK@2MbpsĖ CCK@5.5/11Mbps MIMO-OFDMŕ BPSKĖ QPSKĖ 16QAM Ė 64QAM
4ŕ.	11bŕ 14dBm 11gŕ 14dBm(6Mbps)Ė 12dBm(54MbpsĂ 11ngŕ 14dBm(MCS0)Ė 12dBm(MCS7Ă
)ŕ	FJE-ŕP41 LbŕLbHAŕŕ ŕĖ ŕ -10e C 50e C ŕŕ -40e C 70e C ŕĖ 10Ă 95ĂĂ ŕŕ 5Ă 95ĂĂ
0WŕG	10.8W
ŕ	Fŕ GB 4943.1Ă EN/IEC 60950-1
EMC ŕ	Fŕ EN301 489
Health	EN 62311
4NĂ	4ŕA7hĂ EN300 328Ă EN301 893

V2.0 @ã 0~0

1.2.1.3 RG-AP4210 Cẽ”

7ẽ	M7Aö	ẽe	ĩ
		58ẽ	4N R1-1&R1-2
ẽ7ẽ	Status1		

1.2.2 RG-APD æ

1.2.2.1 RG-APD æ

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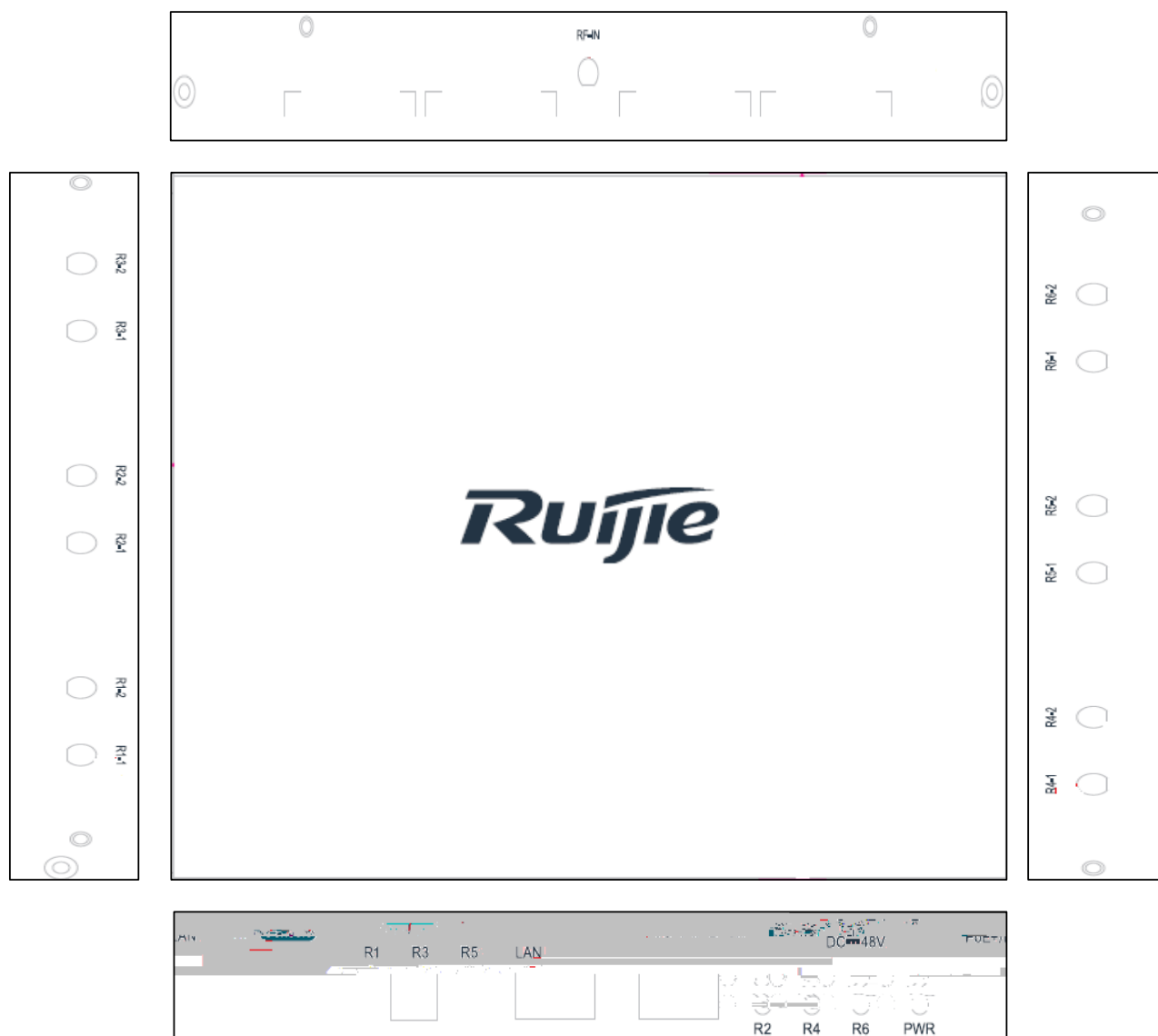
RG-APD-M

0W6G	23W
8	F0 GB 4943.1Ã EN/IEC 60950-1

	DSSSÖ DBPSK@1MbpsÈ DQPSK@2MbpsÈ CCK@5.5/11Mbps MIMO-OFDMÖ BPSKÈ QPSKÈ 16QAM È 64QAM and 256QAM
4)·	11bÖ 16dBm 11gÖ 16dBm(6Mbps)È 13dBm(54Mbps) 11aÖ 14dBm(6Mbps)È 10dBm(54Mbps) 11ngÖ 14dBm(MCS0)È 10dBm(MCS7) 11naÖ 14dBm(MCS0)È 10dBm(MCS7) 11acÖ 14dBm(MCS0)È 9dBm(MCS9)
)ß	FJE=IP41 LbđLbHAAñ ĤE -10e C 55e C ĤD -40e C 70e ĤE 5Á 95ĤÁ ĤD 0Á 100ĤÁ
0WĤG	23W
ß	FĤ GB 4943.1Ĥ EN/IEC 60950-1
EMC ß	FĤ EN301 489
Health	EN 62311
4NĤ	4ĤA7ĤĤ EN300 328Ĥ EN301 893

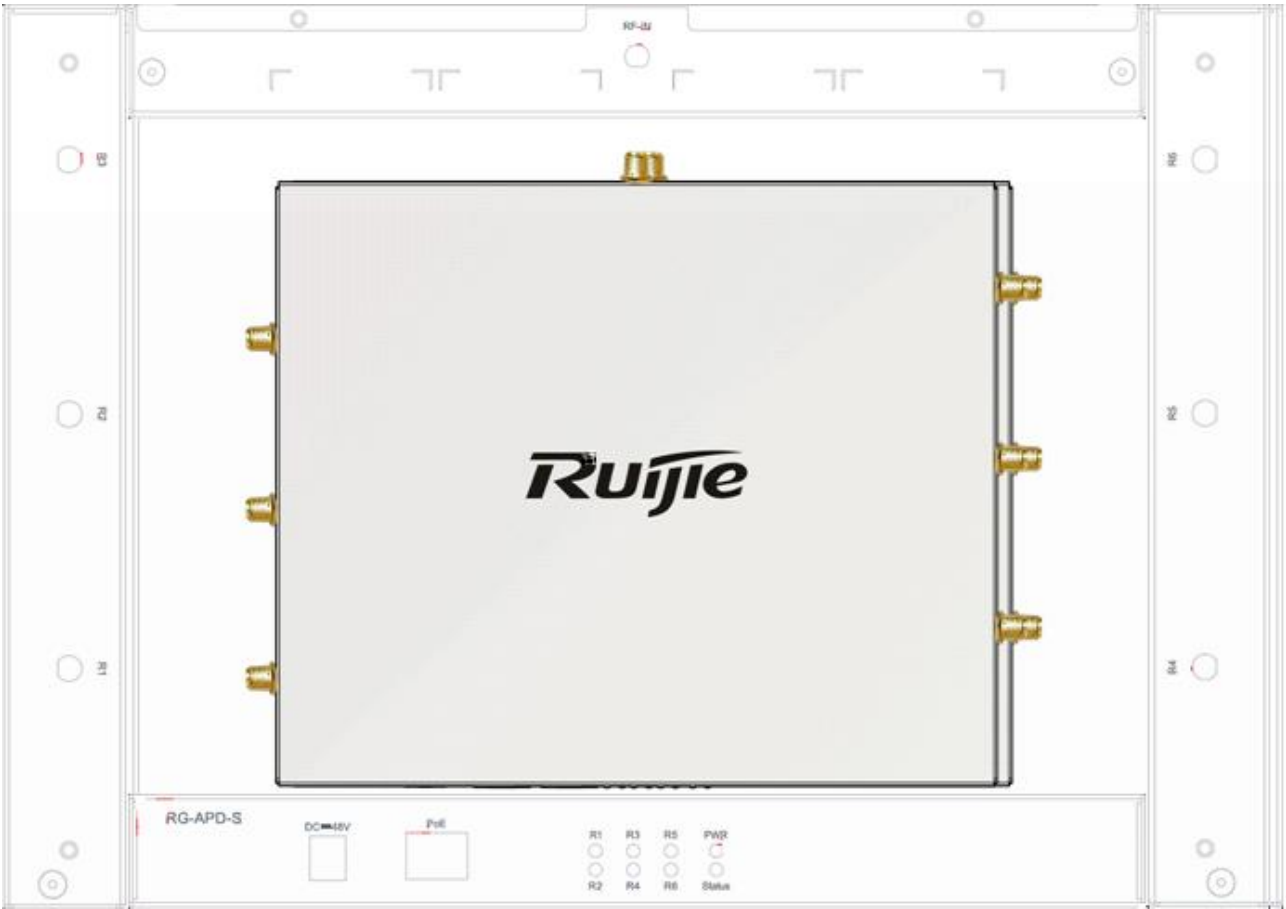
1.2.2.2 RG-APD ĤĤ Ĥ

RG-APD-M

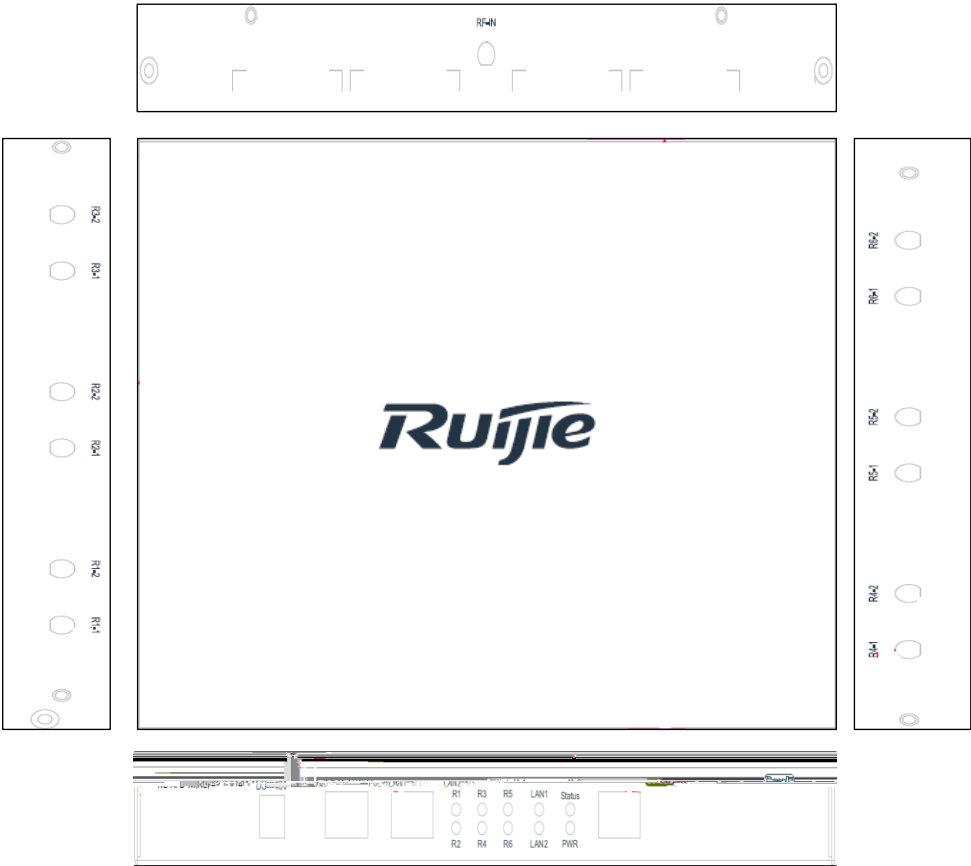


1. R1	R1-1&R1-2 4P/ 1	12.R1-1	AP 4P	1È CH0,SMA 0
2. R2	R2-1&R2-2 4P/ 1	13.R1-2	APD 4P	1È SMA 0
3. R3	R3-1&R3-2 4P/ 1	14.R2-1	AP 4P	2È CH0,SMA 0
4. R4	R4-1&R4-2 4P/ 1	15.R2-2	APD 4P	2È SMA 0
5. R5	R5-1&R5-2 4P/ 1	16.R3-1	AP 4P	3È CH0,SMA 0
6. R6	R6-1&R6-2 4P/ 1	17.R3-2	APD 4P	3È SMA 0
7. LAN	LAN (1P/ 1)	18.R4-1	AP 4P	4È CH1,SMA 0
8. PWR	1P/ 1	19.R4-2	APD 4P	4È SMA 0
9.PoE+/LAN. PoE ĩ	LAN	20.R5-1	AP 4P	5È CH1,SMA 0
10.48V	- 1P	21.R5-2	APD 4P	5È SMA 0
11.Console	RJ45 b	22.R6-1	AP 4P	6È CH1,SMA 0
		22.R6-2	APD 4P	6È SMA 0
		23.RFIN	1P	SMA 0

RG-APDS



1. R1	R1 4Ĥ/ Ĥ	11.R1	4Ĥ	1È SMA Ő
2. R2	R2 4Ĥ/ Ĥ	..12.R2	4Ĥ	1È SMA Ő
3. R3	R3 4Ĥ/ Ĥ	3>> BDC	357.55 380.95 181.7	
4. R4	R4 4Ĥ/ Ĥ	3>> BDC	357.55 380.95 181.7	
5. R5	R5 4Ĥ/ Ĥ			
6. R6	R6 4Ĥ/ Ĥ			
7. PWR	ĤĤ/ Ĥ			
8. Status	(Ĥ/ Ĥ			
10.48V	- ĤĤ			



1-1

1. R1	R1-1&R1-2
-------	-----------

(æ/ĵ&Ÿ

R1

RG-APD-M(AC)

7/j&Y	M' - 7Aö	(æ 1	[y
(æ 1 7/j&Y	R1	5/8¢&Y P	4NÁ R1-1&R1-2 CEl" h
		4Ö8¢&Y P	4NÁ R1-1 =.ž Ê È 4NÁ R1-2 2 h
		&Y&•	4NÁ R1-1 2 h È 4NÁ R1-2 !" h
(æ 1 7/j&Y	R2	5/8¢&Y P	4NÁ R2-1&R2-2 CEl" h
		4Ö8¢&Y P	4NÁ R2-1 =.ž Ê È 4NÁ R2-2 2 h
		&Y&•	4NÁ R2-1 2 h È 4NÁ R2-2 !" h

(æ 1 7/j&Y

RG-APD-S @ Rn

RG-IOA-2505-S1

RG-Cab-SMA-15m 456F

RG-Cab-SMA-15m 456F



Gú Ö
 ' LMA240 4NÁD#4i È15 2E
 " SMA Ä µ=4é µ,, ÅEœ Ö d
 " SMA Ä F=4é µJ, ÅEœ Ö d

RG-APD-S @ Rn

RG

10000 L 150



6	IL-RSG	热缩管	PET	IPCS

15m ĤO4(ĤĤ6KĤ

15m

=ĤĤ4Ĥ APD-M Ĥ (Rn-1= Rn-2)ĤĤ*,° FĤĤ

1.2.5 RG-IOA-2503-X1 Ĥ

1.2.5.1 RG-IOA-2503-X1 ĤĤ

Ĥ	D Ĥ RG-IOA-2503-X1 V1.00
j (mm	201x45x43.5
GĤĤ Kg	0Ĥ 3
Ĥ dBi	3
PĤ	0 2.5@2400-2500MHz 0 2.5@5700-5850MHz
ĤĤ	

ŧ̃		Ĥ?
Ĥ	Ĥ	-30 +65
	CĤ	-30 +65
Ĥ	Ĥ	10%~ 95% ĤĤ
	Ĥ	5%~95% ĤĤ

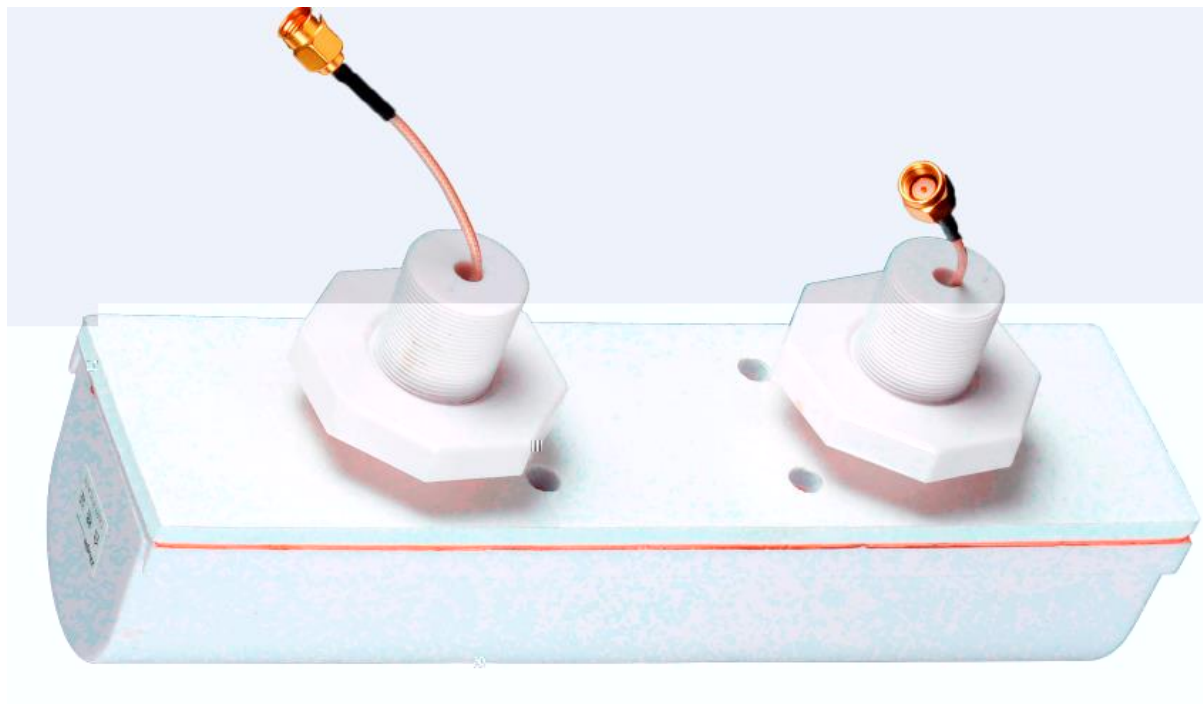
1. 2. 5. 2 Ĥ Ĥ

ĤĤ RG-IOA-2503-X1 V1.00 5[2 Z ŧW SMA ŧ Ä μ Ä ĤĤ FMbX jĤEé ĤĤ/jÖ

		RG-IOA-2503-X2 V1.00
j (mm	200x53x25	
GĖŸ Kg	0.25	
Ĥú dBi	2	
P#	0 2.5@2400-2500MHz 0 2.5@5700-5850MHz	
ŸLĖ dB	40	
LkĖ (i)	50	
Ō	ŸW SMA Ĥ	
ŖĖ	2.4000GHz-2.4835GHz× 5.725GHz-5.850GHz	
ŸĖ	hNŸ	
Ė	Ŗ	-30 +65
	CĖ	-30 +65
Ė	Ŗ	10%~ 95%ŖĖ
	Ŗ	5%~95%ŖĖ

1.2.6.2 Ė Ė

ŖĖ RG-IOA-2503-X2 V1.00 5[2 Z ŸW SMA Ÿ Ĥ Ĥ Ĥ X ĖŖ' ĖĖ ;p/jŌ

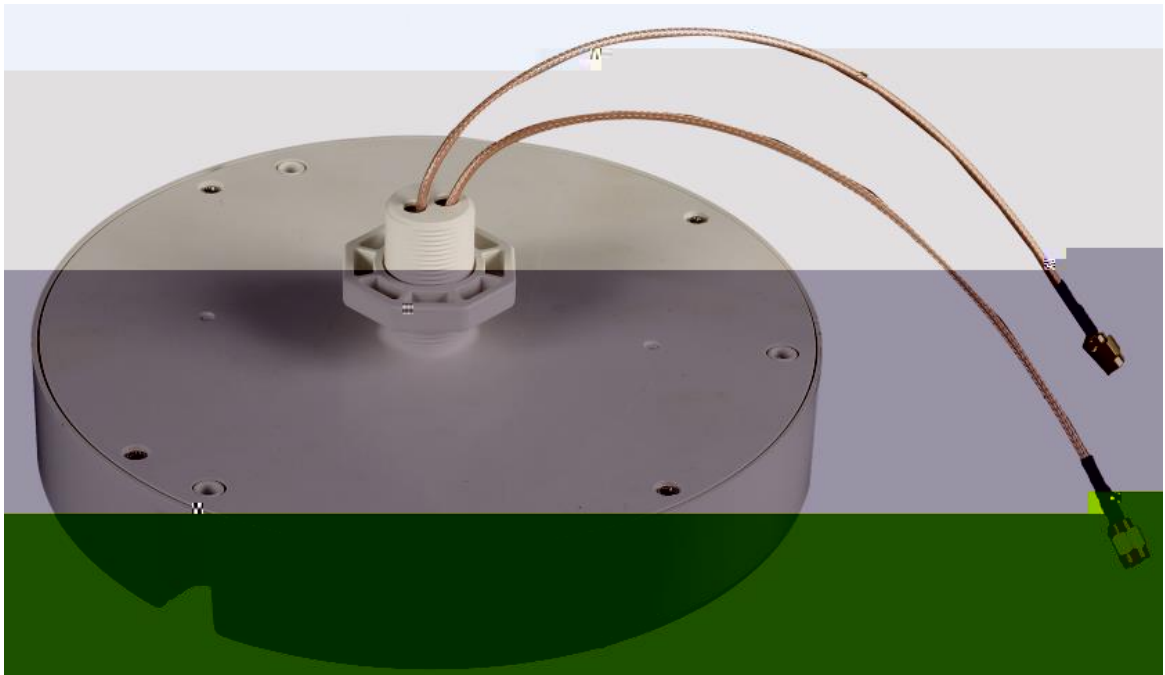


ĖŌ ' 6ĖĖ 4 Z 3x10 Ė d8k=Ŗ
 " ŸŖ!\$ 21mmĖ2{LŖ/Ė 93mm
 " SMA ŖĖĖ
 • ŖĖK 30CM Y

1.2.7 RG-IOA-2503-X3 Ź

1.2.7.1 RG-IOA-2503-X3 ĚĤ

Ĥ	D Ĥ RG-IOA-2503-X3 V1.00
j (mm	211x37
GĚy Kg	0.32
PĤ	0 2@2400-2500MHz 0 2@5700-5850MHz
ŹĤ dB	>=40dB



60	'	66p	4 Z 3x12 q	d8k=61
	"	4F6\$	24mmĚĚ\$	46mm
	"	SMA 0p4Ě		

1.2.8 RG-IOA-2505-S1 Ź

1.2.8.1

1.2.8.2 Ĩ ģ

...D ĩ RG-IOA-2505-S1 V1.00 5[1 ĩ SMA ĩĤ ĩĤ ĩ ĩ ĩMĥ>ũ D ĩ 0
8\$ĥ ģ59p=Ĥ Fĥ/jÖ



ĤÖ	'	6ĥĥ	4 Z 3x10 6d8k=Ĥ
"	ĤV6z'	3.80ĥz'	2.05
"	SMA ĩĤ ĩĤ ĩ	Ĥĥ ģPĥĥ	

2.1 GDB

VM6 V2.0 @ 5/10/2017 10:00:00 AM

2.1.1 Գ

RG-AP4210 ¼ APD ¼X j# T×úM⁷ +Ca 10cm,01\$ È 00,0J 0F>¼F ¼/ý
564>06@4F06 - n5XG4È0FNÄ

2.1.2 ~~4.~~

jAñ A7 !05\$041/8J

A7FP®

„ 4% (5Q,) EFP@55H65H=8EJ8%?ex 9&C+OjM7-FÄZ &K8\$y
)BÄ

43(4)E÷,)E5H(wJ5ECx+OM%eA7:;+eDÄ

„ 4ÜQ,)ÈVÈA7,M·WWW,L}~ÈÖQ\$J)/E061FE0Ä

A7)) ~~100~~ r > 0

°C		-()°C	
KOE	.OE	KOE	.OE
10°C 45°C	-10°C 55°C	40% 65%	5% 95%

Aé)üö ï&ÿAêpD× ¢¶Dfµ 1.5MQÜ , ÐAêµµ 0.4M:
°, ¶t>

```
.#'=F      50CEý  48 E,8eA× CCEý      15  >
```

2.1.3 MÓ.

ИЗДАТЕЛЬСТВО «НАУКА»

ΕΡΕΥΝΑ ΑΓΕΩΕΡΕΥΝΑ

RG-APD-HF04 A7 108H

$$[G] \sim \frac{1}{\Lambda^2} ; \quad \sim \frac{1}{\Lambda^2}$$

0W-\$ (P)	0.5	1	3	5
0W-\$ (P)	1.4×10^7	7×10^5	2.4×10^5	1.3×10^5

Df	mg/m³	mg/m³
WF. SO ₂	0.2	1.5
.FR H ₂ S	0.006	0.03
WF^ NO ₂	0.04	0.15
XD NH ₃	0.05	0.15
D Cl ₂	0.01	0.3

A7 X7-835FGÈEJE6V8Ñ6V8ÑÀÀe
6V8#ÑÑEÑLP70jñ

३३५

” 3+5j TN 3+5j 3+5j X90A PE

C+X\$	LbM%e\$
>~	7+X>~

@M67m8 >ð>

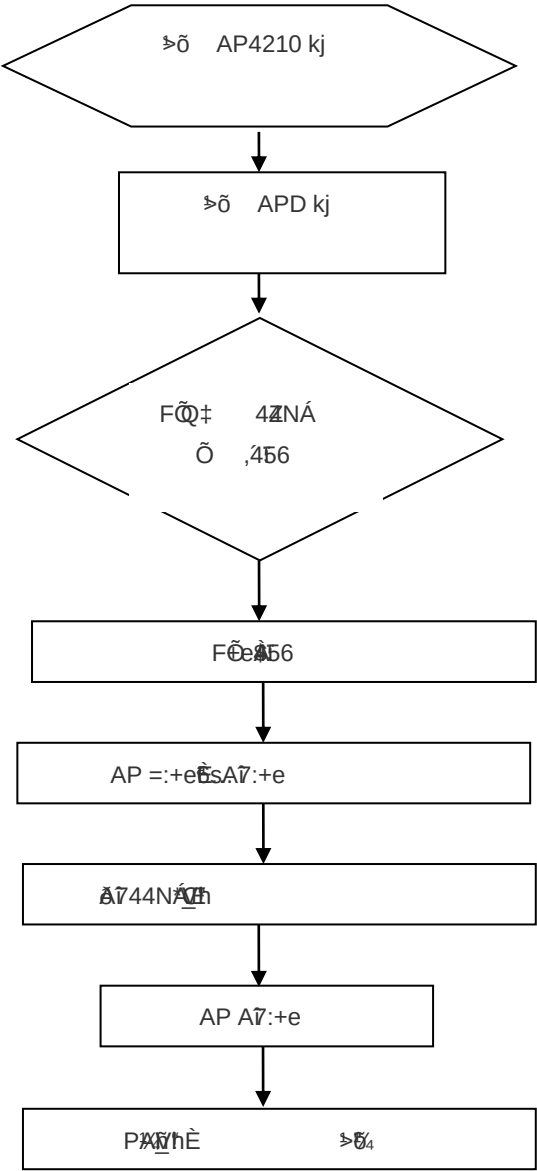
3 Cð

B-A54UB11bÂ,° þ

> .AÚbÂF&,° X(5%Cé

>

3.1 GBV



3.2 G ø \

XB:ĂĤ

„ >07-VĖĖ,Np ĤJE*Ă

„ >0V%CA7)Ĥ ĤĂ

„ >0V35žēĤCĤēĤ ĤĂ

„ >0V35ž(55G}4Ă

„ F9+X Ĥē F_ POE Ĥē Ĥēē+eĂ 7-=7- Ĥē NĤēĂ

„ AP4210,Ĥ RFID0Ă RFID1 ĤFĤ7&=0Ĥ02: RP-SMA COEed

Ĥ

„ POE Ĥē

G+X POE Ĥē&IĤē.FĤ019

802.11af F 802.11at POE Ĥē7-Ĥ65456FĖ

Ă7,Ĥ POE ĤēĤ• 4Ă 5Ă 7Ă 8 4Ĥ Ĥē Ă

„ Ĥē

G+XĤē,&I Ĥē+Xg8>F9C]B' 48V +eĂĤē+eĂ

ĤēēĂ

NĖ-	Ĥ
+eĂĂ	100-240V ACĤ 50-60Hz
+eĂĂ	+48V DCĤ 0.52A MAX× 

3.3 RG-AP4210 G2

IĤ•

Ĥ ĤP & Ė

„

a ^ Aê Ćk±Av ? :NÇ Ġ3(F@ :NÇĠCUE³ Ć ^ 40E17 A @+k%73FVF
Aê,° ă.

F98F245Ě ? 3.1 ,>ġ; Ě A7 >Ġ-(ĠĚĚ4 Ě @>ġ,Ě Ġđ
XQ4B5(Ġ)A7s0imĂ

Ġ001P Aê ,° ,OB-Ġ+kĚ

B-Ġđ00%M>

B-4đ Aê ,° Ġđ0/p&ġ>

G,aBġ

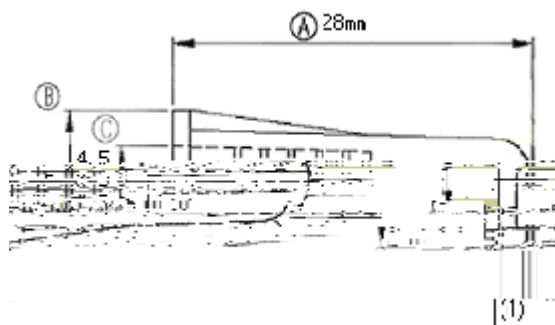
A7E1ĠĠB×ġĚĠ

„ >01Ġ03j(Ö

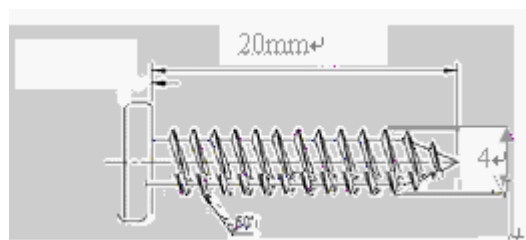
-ĚJ 7000 M7x 4.5x28 Ě mmĂ

=ĠÖ 4*20PABC Ě mmĂ

. 3-1 700ġP



. 3-2 =Ġj?



fÔ G

„ 09đ

1) xXĚ 4 Ġ 6mm ,>Ġj 91h 65mm ,KĠ@ĠB+Xgi>01Ġġ

j(8>TĠ0.201Ġ-05Ġ%ĠĠKĚB=Ġ>

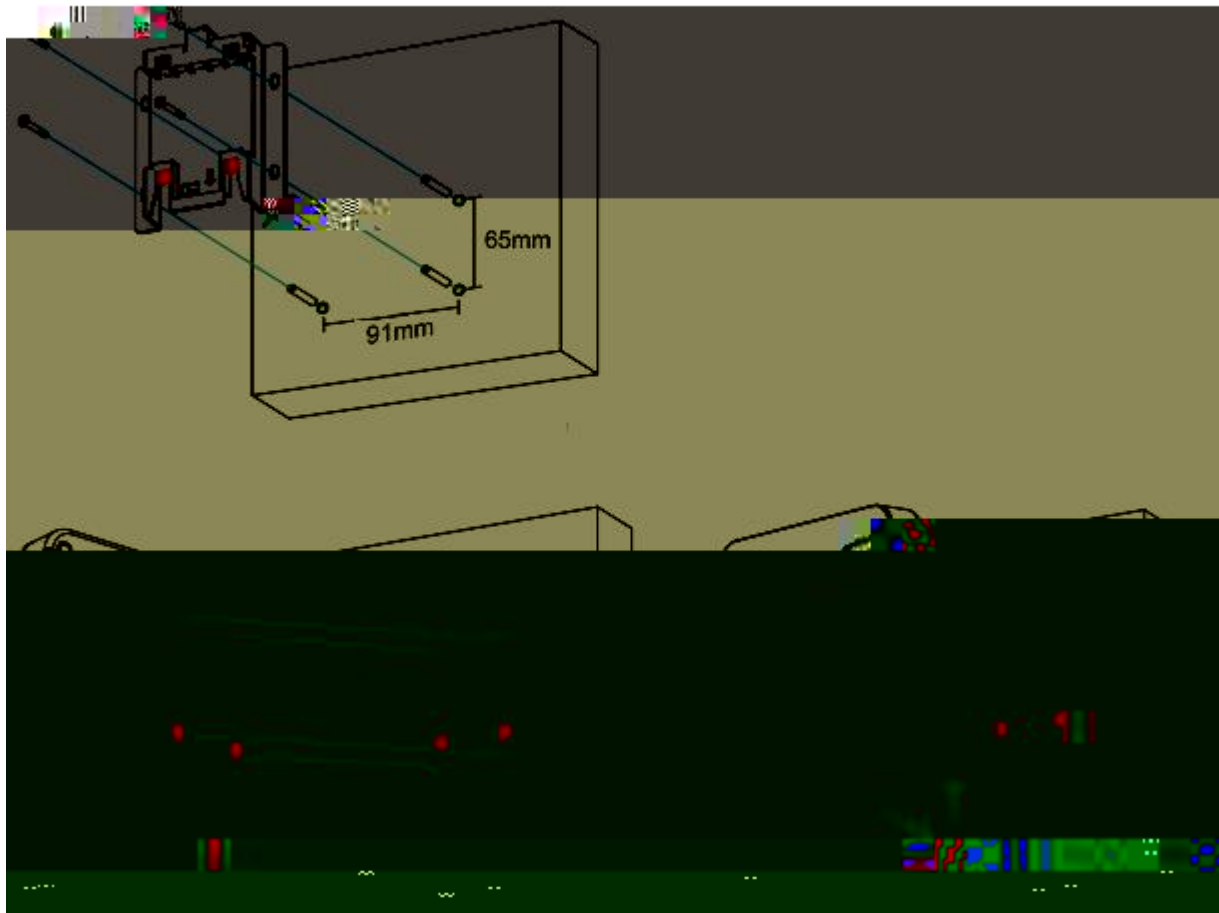
6=Ġ3W*XĚ

2) 6>0.601 Ĥ> ĤUĂ

3) 62@K=0*ĤĂB2@ Ĥ> Ĥ/MFM

/Ă

. 3-3 RG-AP4210 Ĥ>Ĥ?



4) 6 A7 Ĥ2)0@6

A7 Ĥp2@>0kĤĤ

∴ p/Ĥ

& A7 ĤN8Ĥ/2@8Ĥ/ĤĤ

7/ ý A>0 Ĥ

5) K1jN+Ĥ@XgiĤM0r8>ĤCjK1d0>0

2K1B7

A7 0K1Ĥ2&K1ĤiGjĂ

„ hN70

1) xX8Ĥ 4 2 6mm ,>Ĥj 91h 65mm ,KĤ@,Ĥ@XgiĤ0ĤĤ

J;Ĥ(8>Ĥ Ĥ0.2@Ĥ-O5Ĥ%0 ĤKĤĤ=0>6=03W*XĤ

:Ă

2) 6>0.601 Ĥ> ĤUĂ

3) 62@K=0*ĤĂ

. 3-4 RG-APD-HF04 hN70?

6>2ăX=â6*Ĥ8ă

3.5 Glô

XĤ5Ĥ5Ĥ8ăXAăĤAă

Xi DBW

4 G

4.1

ô p ch

„ PoE ěBĥ .AĤĤ01V8A%Că 802.11af ěBĥ056VFFJhĂ
 „ DC ěBĥ92+eEĥĥ ěA7 Vhĥ

B SSID ĥ SSID

1) xĥ, AP

„ 9 Rn &ñ/jj 5/Šj4NĂ Rn-1 ¼ Rn-2 Æ4Fð