1 C| O”

RG-S5760-L 3+ G Ô ' j _K@ §5•5 Ø *,´=½ 8 ¶Q W7- ÃQ ¹˜ Ã J J Ñ,´ à 0 9 r Ô ' j Ä k?± Ä+X ¾ Õ • r È Ë ˜4ïFO J r Ô ' È ¼´,´ QOS 1†+• È i ž = < Ä+X) = < J Ñ#q 64× 4*6 È AñGý?± ž PEÃ & & Ä < &F Ë&¥#k,´ ûCX Õ È% Cã5•5 *Aî] = < ûCX,´F ÕM0?± Ä

RG-S5760-L 3+ G Ô ' j - } 5 [; 9!n k j Ö

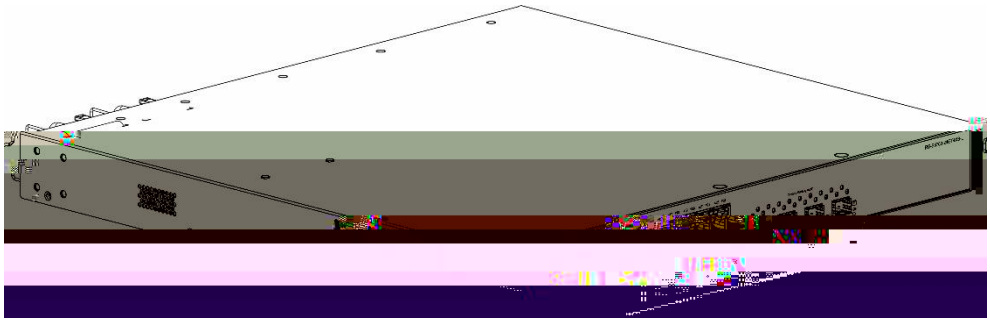
ñ » '	10/100/1000Base-T 8 F2 Ä Z5•1	s v SFP Õ	7 v SFP PLUS Õ	MGMT	USB	Console	Ç ‰+e$À
G-S5760-24GT4XS-L	24		4	1	1	1	ü+e$À
RG-S5760-48GT4XS-L	48		4	1	1	1	ü +e$À
RG-S5760-24SFP4XS-L		24	4	1	1	1	

1.1 RG-S5760-24GT4XS-L

P á ? d

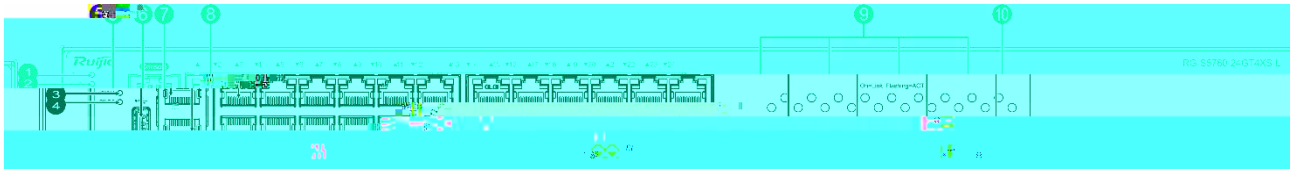
× ñ » '	RG-S5760-24GT4XS-L
CPU	**ü h 4*6 ˜ È … h kNÁ** 1.2GHz
BOOTROM	16MB
Flash Memory	2GB
SDRAM	1GB
_ 1,´ y Q ‡2« »	SFP+**1 Ö** **_ 1** SFP **y Q ‡ Ã** SFP BIDI **y Q ‡ È ò63Lt …**B **_ 1** SFP+ **y Q ‡ Ã** SFP+**4ï56 Ã**SFP+ BIDI **y Q ‡ È ò63Lt …** C **e 7,º W • Á - ? %73LÅ , * æ ¸ - ‰B- ÞB KF -5‡5 >**
+e$À Q ‡ - }	**Gÿ Ö**2 **„ _ 1+e$À2« » Ö**RG-PA70IB **Ô#q Ä**
+e$À Q ‡2« »	

. 1-1 RG-S5760-24GT4XS-L × ñ F?ò .



ø „ Â

. 1-2 RG-S5760-24GT4XS-L }M' ¯/j ? .



# Gú Ö	1 Ê(æ 1 7/j&Ÿ	7 Ê1Ñ*6+X Z5• Õ Ä MGMT Å
	2 ÊMGMT Õ (æ 1 7/j&Ÿ	8 Ê10/100/1000Base-T Z5•1
	3 Ê+e$À(æ 1 7/j&Ÿ(PWR1)	9 Ê 7 v SFP Plus 1
	4 Ê+e$À(æ 1 7/j&Ÿ(PWR2)	10 Ê1 (æ 1 7/j&Ÿ
	5 ÊUSB Õ	
	6 ÊConsole	

d „ Â

. 1-3 RG-S5760-24GT4XS-L >M' ¯/j ? .

# Gú Ö	1 Ê Õ ` !	
	2 Ê+e$À Q ‡1	- Ä = +e$À & ÈM0 ¹>õ+e$ÀQ ¯ Å
	3 Ê+e$À Q ‡2	- Ä = +e$À & ÈM0 ¹>õ+e$ÀQ ¯ Å

	!ÿD EÃ • NÍ Ê+e#qÖ5A
SFP Plus 1	_ 1 10GBase-R _ 1 1000Base-X
RTC	_ 1
PoE Ï7-	= _ 1
k j Ï6G	<55W
Œ)ß ³ $Y Ö	

K (| g ? Ö

C | Ø O

RG-S5760-48GT4XS-L Z5• Ô ' j }M' ¯ Ë 9

Ce

7/j&Ÿ	M' ¯ 7Aö	(æ 1	[y
(æ 1 7/j&Ÿ	Status	7/j&Ÿ&•	Ô ' j"Ñ 9 :+e
		5 / 8 ¢ L &ı Ä3HZ Å	Ô ' j!" X M û F È3HZ L &ñNÁ)·È9 0-$L &ñ I >˜/j 2 h Ä
		5 / 8 ¢ L &ı Ä10HZ Å	+X ¾Aî 7)à j Ê } È _ 1F 5$ ê ˆF 0; 0 _ ¼ £L
		5/8¢ h Þ	Ô ' j !" h Ô '
		Tô8¢ h Þ	F *Nþ $Y ÖCµ *3+5 ,´!" h Œ$Y Ö
		4Ò8¢ h Þ	1 ÃF *Nþ $Y Ö UGýCµ *!" h Œ$Y Ö 2 Ã Ô ' j uLÌ
+e$À(æ 17/j&Ÿ	PWR1/PWR2	7/j&Ÿ&•	+e$À Q ‡"ÑF Õ
		5/8¢ h Þ	+e$À Q ‡"F Õ ¦ !" h Ë+e
		Tô&Ÿ h Þ	+e$À Q ‡ » ' # B+ F B+ v » ' = _ 1
		4Ò&Ÿ h Þ	Ç ‰+e$À Q ‡ uLÌ F65 ZF ÕAC 4ï56
MGMT Õ (æ 1 7/j&Ÿ	MGMT	7/j&Ÿ&•	1 Z Link Up
		5/8¢ h Þ	1 1000M Link Up
		5/8¢L &ñ	1 1000M ž f
		Tô&Ÿ h Þ	1 100/10M Link Up
		Tô&ŸL &ñ	1 100/10M ž f
7 v SFP Plus Õ 7/j&Ÿ	49F-52F	7/j&Ÿ&•	1 Z Link Up
		5/8¢ h Þ	1 10G/1G Link Up
		5/8¢L &ñ	1 10G/1G ž f
10/100/1000Base-T Z5•1 7/j&Ÿ	1-48	7/j&Ÿ&•	1 Z Link Up
		5/8¢ h Þ	1 1000M/100/10M Link Up
		5/8¢L &ñ	1 1000M/100/10M ž f

1.3 RG-S5760-24SFP4XS-L

P á ? d

	_ 1 SFP y Q ‡ Ã SFP BIDI y Q ‡ È ò63Lt … B _ 1 SFP+ y Q ‡ Ã SFP+4ï56 ÃSFP+ BIDI y Q ‡ È ò63Lt … C e 7,º W • Á - ? %73LÅ , * æ ¸ - ‰B- ÞB KF -5‡5 >
+e$À Q ‡ - }	Gÿ Ö2
+e$À Q ‡2« »	„ _ 1+e$À2« » ÖRG-PA70IB Ô#q ÄAC ÅEÃ • NÍ Ê+e »93 $ Ö100-240V~ 0 W+e »93 $ Ö90-264V~ NÁ)· Ö50/60Hz !ÿD EÃ • NÍ Ê+e#qÖ2A „ _ 1+e$À2« » ÖRG-PA150IB-F Ô#q ÄAC ÅEÃ • NÍ Ê+e »93 $ Ö100-240V~ 0 W+e »93 $ Ö90-264V~ NÁ)· Ö50/60Hz !ÿD EÃ • NÍ Ê+e#qÖ3A „ _ 1+e$À2« » ÖRG-PD150IB-F -$#q ÄDC ÅEÃ • NÍ Ê+e »93 $ Ö-48Vdc- -60Vdc 0 W+e »93 $ Ö-36Vdc- -75Vdc !ÿD EÃ • NÍ Ê+e#qÖ5A
SFP 1	_ 1 1000Base-X _ 1 100Base-X
SFP Plus 1	_ 1 10GBase-R _ 1 1000Base-X
RTC	_ 1
PoE Ï7-	= _ 1
k j Ï6G	<85W
Œ)ß ³ $Y Ö	0 ‰ ~ 45 ‰ Ä0-1800m #§ Å B$ >:#§ 1800~5000m Ö#§ !ÿ wQ 220m È 0Q $Y Ö?ô lL} ~ 1 Ä
ˆ Ø)ß ³ $Y Ö	-40℃ ~ 70℃
Œ)ß ³ $¯ Ö	10% ~ 90% RH Ä ç Å
ˆ Ø)ß ³$¯ Ö	5% ~ 95% RH Ä ç Å
Œ#§	

GýGÿÄ … } Ökg Å	4Ö4.2kg ÄK (| XAî 7 ÅG È ² ; . Å

K (| g ? Ö

C | Ø O

RG-S5760-24SFP4XS-L Z5• Ô ’ j }M’ ¯ Ë 9 24 Z s v SFP Õ Ã4 Z 7 v SFP Plus Õ Ã 1 Z1Ñ*6+X Z5• Õ Ä MGMTÅ 1

ø „ Â

Ce

7/j&Ÿ	M’ ¯ 7Aö	(æ 1	[y
(æ 1 7/j&Ÿ	Status	7/j&Ÿ&•	Ô ’ j"Ñ 9 :+e
		5 / 8 ¢ L & Ä3HZ Å	Ô ’ j!“ X M û F È3HZ L &ñNÁ)·È9 0-$L &ñ I >˜/j 2 h Ä
		5 / 8 ¢ L & Ä10HZ Å	+X ¾Aî 7)à j Ê } È _ 1F 5$ ê ˆF 0; 0 _ ¼ £L
		5/8¢ h Þ	Ô ’ j !“ h Ô ’
		Tô8¢ h Þ	F *Nþ $Y ÖCµ *3+5 ,´!“ h Œ$Y Ö
		4Ò8¢ h Þ	1M’ çý $Y +5 ,´!“ h Œ$Y Ö

1.4 Ô | ±

1.4.1 RG-PA70IB Ô | ±

RG-S5760-24GT4XS-L ÃRG-S5760-48GT4XS-L ÃRG-S5760-24SFP4XS-L _ 1 RG-PA70IB +e$À Q ‡ Ä RG-PA70IB _ 0!n Ô#qEÃ • Ä _ 1 HVDC ÅÃ-$#qEÃ *,´ Ô#q+e$À Q ‡ È Ë 12V

(©&é	B$ >
¯+X 9Lb%6	§ 9Lb%ž ÈLb- M. ÈLbM9 È5 5H ÈLb%?+e1y Ï7-
§ 9 Ô Ï7-	§ 9EÃ •!P » Ô ÃEÃ *E÷#q Ô ÃEÃ *E÷ » Ô ÃEÃ *. D Ô1y Ï7-
§ 9 I2C FJAß Ï7-	k j FJE÷ I2C >B +e$À Q ‡F >|FJAß
_ 1 Ç ‰ 7 -	_ 1 ü+e$À Q ‡ ¦6„ Œ È þ6< Î)à +eAî 7+e$À3+5 1+1 7 - È ¦ D 7 -+e$ÀL$ § 9 COE- w#q Ï7-
_ 1'	XAî 7 = Ý+e,´ õ å ; È x Ý 0 1+1 7 -+e$À3+5] Z+e$À Q ‡ > F+| Ë+e3+5 ,´F Õ È 'f >-$ Õ)+e$À Q ‡F >| ý Œ
_ 1+e$À 2 h zA– Ï7-	X+e$À *)à uLÌ &FJE÷EÃ *(æ 1 7/j&ŸF >\|+e$À 2 h zA–

RG-PA150IB -F Ô | ± Ce

=0	(æ 1	[y
EÃ *(æ 1 7/j&Ÿ	&•	RG-PA150IB-F +e$À Q ‡ EÃ * FEÃ * *)à uLÌ
	5/8¢ h Þ	RG-PA150IB-F +e$À Q ‡EÃ *!“ h

1.4.3 RG-PD150IB-F Ô | ±

RG-S5760-24GT4XS-L ÃRG-S5760-48GT4XS-L ÃRG-S5760-24SFP4XS-L _ 1 RG-PD150IB-F +e$À Q ‡ Ä RG-PD150IB-F _ 0!n-$#qEÃ • Ã-$#qEÃ *,´+e$À Q ‡ È Ë 12V ,´EÃ *+e » È 0 WEÃ * Ï)· Eî ` 150W Ä

Ú ˜ p % µ+^ 1 `+k$Æ Ñ+k ¸• % B , µ+^ 2 `+k$Æ Ñ+k ¸‰2 `+k$ÆG3 : Ä!™ n '(ì 7 , ¸ 2 `+k$Æ : Ä }#w Ñ+k (ì 7 >

315 6 GM6?·Gƒ5¤1 ` +k$ÆW • ƒ73 !™ n ' ¸"× ?Gƒ5¤+k$Æ,º 3 ƒM6?· ¿>û0° W µ ¸ A÷ p1ç,º!™ nFPO ™'# ¸Fµ ƒ&¦ N >

RG-PD150IB -F Ô | ± P á

N©-	?ô l
+e$À » '	RG-PD150IB-F
EÃ •NÍ Ê+e »93 $	
EÃ • 0 W+e »93 $	DC -
EÃ •+e#q93 $	5A MAX
EÃ *+e »	
0 WEÃ *+e#q	12.5A
0 WEÃ * Ï)·	150W
F ' j (Ä$! X í X Q Å	196mm*50.5mm*40mm
GýGÿ Ä … } Œkg Å	4Ö kg
Œ$Y Ö	-
^ Ø$Y Ö	- ~+70
Œ-( )$¯ Ö	5%~95%
^ Ø-( )$¯ Ö	

Œ#§	0~5000m

RG-PD150IB -F Ô | ± ¤C¯

(©&é	B$ >
¯+X 9Lb%6	§ 9Lb%ž ÈLb- M. ÈLbM9 È5 5H ÈLb%?+e1y Ï7-
§ 9 Ô Ï7-	§ 9EÃ •!P » Ô ÃEÃ *E÷#q Ô ÃEÃ *E÷ » Ô ÃEÃ *. D Ô1y Ï7-
§ 9 I2C FJAß Ï7-	k j FJE÷ I2C >B +e$À Q ‡F >|FJAß
_ 1 Ç ‰ 7 -	_ 1 ü+e$À Q ‡ ¦6„ Œ È þ6< Î)à +eAî 7+e$À3+5 1+1 7 - È ¦ D 7 -+e$ÀL$ § 9 COE- w#q Ï7-

2.1.3 Ô) µ

„ F >|+e"D ý Œ & È õN«F¥ ¸ p X `,´# ?ô ¼?ô93 Ä-(£ Œ ê ˆ õN« § 9-(Ä,´ Œ JCt l Ä

„ B' 4ö ð X Œ j µ _ V ˆ X%Œ X,´ ¡L™ È" ²+e$À Z Õ ` È+e$À Õ ` = M• È `M' _ V%ž$¯1y Ä

„ X ¹>õ } È?±. Fƒ p X Ô µ,´3W U+e$À 0 £,´ }5ž È ƒ +O ? F & È?± x 7 Ý+e$À 0 £ Ä

„ mGÿ =?± 0 Z ê V+e5$ Ô Ä

„ M0?± £L +e$À & È 0 Ê?± 4ö ð .žAÔ Ä

„ B' =?± ºAî 7 n X%ž$¯,´ ` é È • =?±AÙ#â ƒF •Aî 71á ƒ µ Ä

C?ú99 = C!™.¤,º+k"J ' %73 KC-&¡&´ L+k 11• E L Á { ¸ ¬ / ð ‰ ÂAô =FV F [H =8* ³,º Z é >

-* Û LFPEý%¤$µ(Ÿ ‰L* Û Û@ Q Á = 8+k ¸ %73 \ ›8* ³ §LŸ >

9 Ñ+k315 ?Gƒ5¤%E+k#w Ú ž ´1¶0&%E+k#w 6 ©þ ! %E+k#w ãD%µžHYPERLINK "E:\\Allen\\work\\S57X\\%E+k#w 6 © "HYPERLINK "E:\\Allen\\work\\S57X\\%E+k#w ãD% ž O" `%E+k#w Ú ž,ºF?+^ ¸ ¬NÓ Ð%E+k Þ '+k#w Ê ÔL{315 v ?Aô =%E+k#w*<Að 6 ] r,º 2 Ć Á ¸ Æ 315 Gƒ5¤ 16 `-. B+k$Æ"¸ `+k$Æ%E+k#w Ò1.75mA ¸O315 v ?%E+k#w q Â e 28mA Ç 6 ` 30mA NÓ Ð Þ '+k#w,º%E+k#w Ú ž ¸ % Û ›,º+k$Æ ¦H <9 ´ ©%E+k#w Ú ž Þ '+k#w /2/" `+k$Æ,º 6 ]%E+k#w =30/2/1.75 J 8.57 µ ¸ © 6 ` 30mA NÓ Ð Þ '+k#w,º%E+k#w Ú ž ¸ 6 P 73 Û 8 `+k$Æ ¸FÙ ~315 c 16 `+k$Æ 6 GM6?· 2 ` 30mA NÓ Ð Þ '+k#w,º%E+k#w Ú ž ¸" `%E+k#w Ú ž Û

„ y4Ô f ˜ Œ & È Ä.ž 1 F : y4Ô4ï F+XLb H- Ž • È F¯ }& HF • ¼&¬ T ê-l Ä

„ B' =?±-$?ö y Õ Ä

Að ^ ‹0 û ë AG3 C % M–F L-*?ü • ¸ ƒFV F-r-',º"n { • … >

"D ƒ	£ w l (mg/m³)	0 W l (mg/m³)
¼"W F.› SO_2	0.3	1.0
.› F"R H_2S	0.1	0.5
¼"W F"^ NO_2	0.5	1.0
"_"D Cl_2	0.1	0.3

a © } r e 6 ž »,º © } r > 6] r e ^ 6 ž »,º ·L† r ¸" _ CC»Ey 30 <JÕ >

2.2.4 ñ s ä L -

Ô ' j X ¯+X] 7- ` •8 3+5 FG ,´ ¢ ÈF Ë ¢ FJE÷+e é6V 8 Ã+e O6V 8 Ã+e.ñ# EÀ 4 Ãœ ¡Lk ÇÄ 5 Õ `3+5 Å 6V 8 ¼ ,4ï Ä+e$À4ï Ã '4ï ¼EÃ *4ï1y Å,´ P , é ?)Aî 7 ×+O ¡ ý Ä j!" Ä# ? Ö

„ Ô#q Ë+e3+5 j TN 3+5 È Ô#q+e$À × ÄG÷+X 9 Ô `4ï Ä PE Å,´ …-(94ï+e$À × È ¯Aî 7 :% # +eD 7- 9 x,´ % L"+e5• ¢ Ä

„ Ô ' j Œ `&éF /ë j Ï)· 4ï+e 4 ÃM'Eî 4 ÃQ NÁ W+e#qAî 7 Ä

„ õ?± &G÷ +e.ñ •;m,´ é# È ² Õ +e56G÷+X •;m+e56 Ä

„ Õ +e56?±"r X Ô µC 4ï È/±!' g FC 4ï È Lb!' M'+e ×+O,´E÷+e » ÃE÷+e#q 6Aî 7 ' • • Ä

2.2.5 x ž / © L -

8Ÿ -,´ Õ `3+5 _Aî 70c Ê M•F >|,´ _Lb!'M' + Ã å Ç ¢ ,´OÆ?± Añ ' & ÄB' 9Aî 7 Õ `?ô93,´?±"r ÈAÔ-O ð ¹>õ)à j,´ Õ ` ' & È ¦ i ž ÎLu õ å º Õ ` Œ Š - Ä

Ú ˜ p Û f4õ,º!™ nF Û e Ú ˜ pLhM- =Lh ¨ ¦,ºH ?· LÒ ¸ v +^ m ûN±!™.¤ Û f >

µ / ©

¯+X Ô#q+e,´Aî 7 õN«FJE÷Tô5/8¢ ¹ ˜ `4ï Õ ` È V l ƒAî 7 µ,´+e$À > j # {L$,´5 5H+eLk ? & È J ,8$+e + T ã Ä

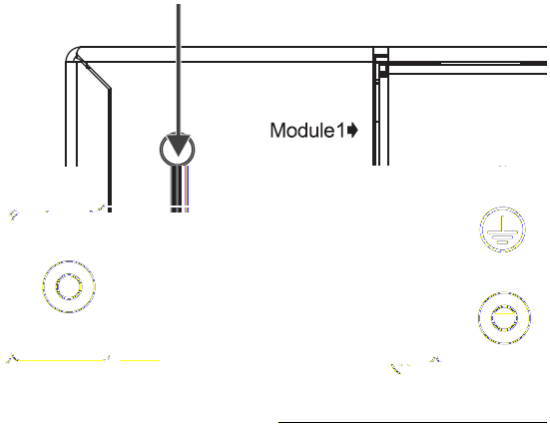
y Ô / ©

Aî í,´M'+e Ô3+5 _ 0 Z) 0û,´3+5 È+aF¯M'J¸ Ã ; , ƒ ¼ > Õ `3+5 -(F ,´ Õ d4ô @ ÄB Õ `3+5 FJ h >+X Œ+e$À ò63 ` úTô5/8¢ ¹ ˜ `4ï,´ Õ ` _ ¡+X,´ ÄM'+e n+e Õ ` õ)Aî í6<@0 ÈAî 7"Ñ 9F Z?±"r Ä

Ô Â / ©

*** ¾+e.ñ ¬ éAîAÑ6<?±"r,´ Õ ` È5 Ö•;m Õ ` Ã% # ˜ Õ ` Ãš ¼ ¢ Á f Ã+e £ ò63 Ä:F ' @ ¶ Õ `,´5, 8?±"r Ä Õ `+eLk?±"r ? ¾ ÄAî 7 >M' ¯+‰ 9** 1 Z Õ ` ! È ² ; . Ä

. 2-1 Õ `/j ? .



2.2.6 T y L -

ƒ Ô#q+e$À4ï þ g F E • È-$ Õ Õ ` Ô ' j+e$À & È Ô#q+e$À ÄG÷+X F ÕLbM' Õ4ï Â,´ é ? •Lb!' Ô ' jF• M' + ÄLb M' Õ4ï Â +X4ï " ¼=êJ¹ * Ê X j Ã Œ F j o,´ É ñ : Ä ¯+X & È Ô#q+e xF •LbM' Õ4ï Â È4ÿLbM' Õ4ï Â > ½F • Ô ' j Ä

LhM- Û4õ È ¬ CLÅ p Ñ ¸+^ m % o ¤8 ',º ÔL{M6?·8 >,F?Cc >
LhM- Û4õ È,º µ+^ ¸B- ø'•LhM- Û4õ È,º-. ©B* D œ >

2.2.7 EMI L -

4/ý ¢ $À È Aê _ •8 Aî 7 F Ä+X3+5 FG ÈF _ •8 µG ÈG- _ +e é6V 8 È+e O6V 8 È+e.ñ# EÀ 41y P , é ?)Aî 7 ×+O ¡ ý Ä

+e.ñ ¢ 6 j T2« ÖEÀ 4 ¢ ¼ P , ¢ ÈF _+a P ÝD ´,´2« » • Ê,´ Ä

ƒ 0 Z ˜ & 4,´7-Gÿ ÈFJ h _ 4NÁ7-Gÿ ÈFJE÷0ªL$ `Eî • O ˜ & È jEÀ 4 ¢ Ä¢ $À _ ¢ 3+5 ],´ 0G 6 È • _ ¼ ˜+e"DLÄ/ë,´ … s ÄP , ¢ ,´ ×+O _ j$À > • O ˜ {L$ 9+e.ñ4ï F '+e56F Õ È¢ "ï-p+e56 þ 0 Z … s P ` 0 Z … s Ä P , ¢ 4ÿ h J ¡ ýAî 7,´+e$À ÈF FJE÷% # ˜ • × f ÄEÀ 4 ¢ 7- ¡ ýAî 7],´ + … 'D ´ È ¦ •;m 9E³ WLî Ö Ä

„ ?±) Ë+e3+5 G÷ 9 x,´Lb+e5• ¢ Ú í Ä

„ Ô ' j Œ ` 0 - =?± >+e ËAî 7,´ Õ `>õ5ž ¼LbM' Õ `>õ5ž 8+X È ¦ m 7--(D F 0 Ë Ä

„ F /ë j Ï)· 4ï 4 ÈM'Eî 4 ÈQ NÁ W+e#qAî 7 Ä

„ õN«G÷+XM‰+e •;m é# Ä

2.3 ¯ • ä Ž I ¿ 6 •

y4ÔF Õ } È Ä# ?AÔ$5 yF Õ ˜2« » ¼ y4Ô,´/ý2« _ V > p ,+X,´ y Õ 2« »-(1V È< & ÄB # ? y4Ô4ï,´ F1 ¼ Õ f é A È \Aî 7,´ F1 ÄB >) éAî 7,´ Õ f-(Õ È \Aî 7,´ Õ f ÄB >) éAî 7,´ F1-(Õ Ä

3 C | é G

B-.¤AÚ Þ (5 4üL;B11b Â1 ,º » ï ¸ .¤AÚ1b Â1 vF&,º?·"x (5 % Cé >

3.1 G W 8

3.2 G ø \

X ¹>õ }B'.žAÔ ; &é Ö

„ ¹>õ 47- V ËCã O,´Nþ#qFJE÷ × ñ Ä

„ ¹>õ 4 _ V% CãAî 7)$Y Ö ¼$¯ Ö,´?±"r Ä

„ ¹>õ 4 _ V " 35ž -+e$À ¼% Cã)+e#q?±"r Ä

„ ¹>õ 4 _ V " 35ž --(£5•5 G}4ï Ä

3.3 G @ & ²

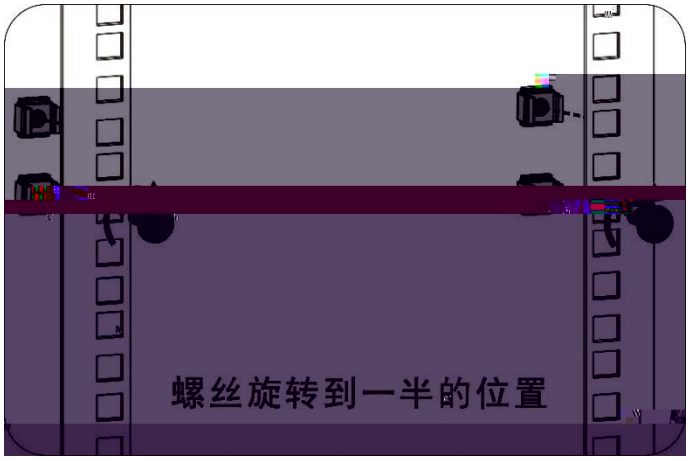
I ¿ 6 •

¹>õ & ÈB'# ? ; &é Ö

„ Ä ¯+X) ÄNÌ8¢,´+e$À4ïF Õ) Ä,´ Õ4ï ! : Ä

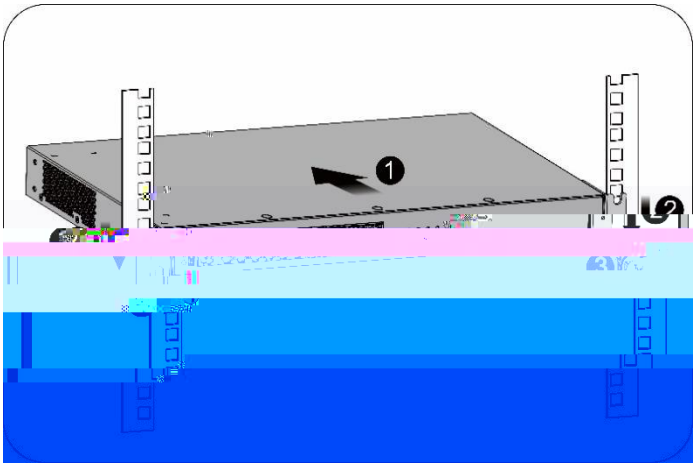
„ Ä.ž F Õ >,´+e$ÀF Õ4ï Õ@ 8Ÿ - Ä

„ Ô ' j



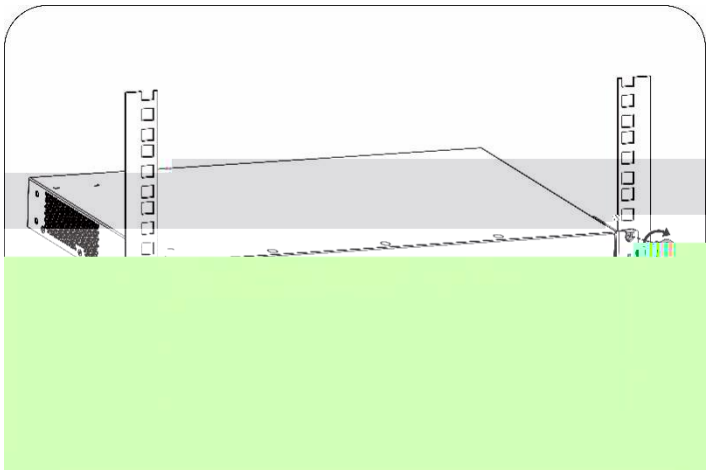
1\ 9!• Ö 6>õ 9 26c,´ Ô ' j 2 ` M6 =ê M : È 3W=ê M

. 3-3 j ? 26c ¹>õ/j ? . 9



1\ !• Ö 6 : é,´ M6 =ê M ¹>õ : ¦ 3W

. 3-4 j ? 26c ¹>õ/j ? .



- 73 ©0i f ›+k$Æ W • > › , ¸B-# E+k$ÆM˜ µ,º ï G ¸ C?· KO >
- ^ ›Eý0A c ¸ ¸ ÒF} f # Þ › L6; ¾Lô Þ › ¸ VTAf # Þ › L6;

„ ð Õ 4ï56 _ VG- X Ô µC 4ï È g FC 4ï)àB' ×9 9 g FC 4ï õ å ÈB' ð _ VF >| ¶ Ô#q+e$ÀLbM' Â Ã5•

4 x ž • p

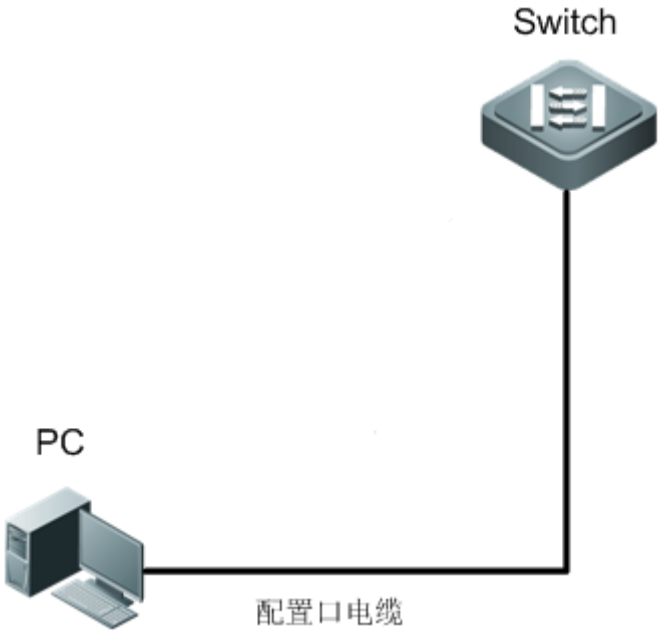
4.1 @ Ž ´ º Ê

´ º Ê @ Ž

PC FJE÷G}5ž+e56 > Ô ' j-(F È ²

. 1 p/j Ö

. 4-1 G}5ž)ß ³/j ? .



´ Ô § é ä /

1) Console F Õ!•PÔ Ö

„ 6G}5ž+e56,´ DB-9 „ ? d Õ `?±) Ô ' jF >|G}5ž,´ PC ,´ b : Ä

„ 6G}5ž+e56,´ RJ-45 01 F ` Ô ' j,´G}5ž Ä Console Å : Ä

f ´ " O ? d

„ ƒ 0 PC È ¦ X PC :F >|4ø1 /-O0; ¿ Ä ² Windows3.1 ,´ Terminal ÈWindows 95/98/NT/2000/XP ,´Cµ4×4ø1 ÅÄ

„ Aî5ž4ø1 ò Ä ò ?±"r Ö# (©)· j 9600 È ž } j 8 È w ¦ QP¼ j È Œ!' } j 1 È#qGÿ × f j Ä § ƒ é# ² ; Ö

1) &é+ ³0 û ´ - Ð; ¿ ´ - Łt & ´ - FJAß´- €Cµ4×4ø1´ÈF •Cµ4×4ø1 0Ç È3+5 i * ²

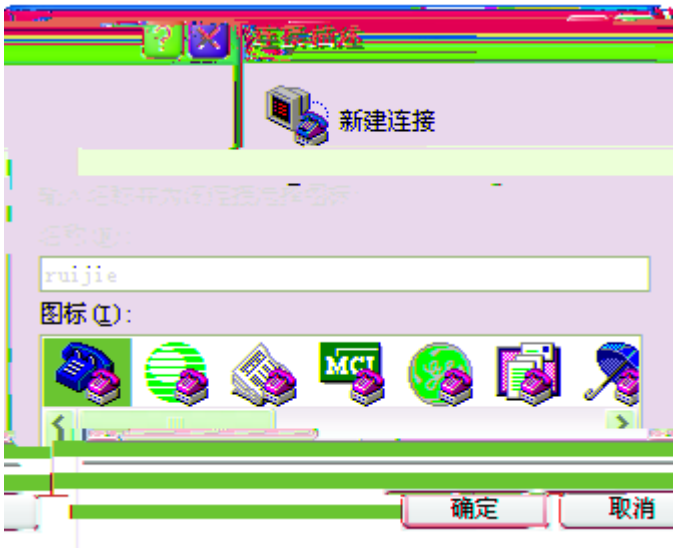
2) . 4-2 p/j,´+|M' Ä

. 4-2

3) &é + ³ #¸ ´È 3+5 i * ²

4) . 4-3 p/j,´+|M'

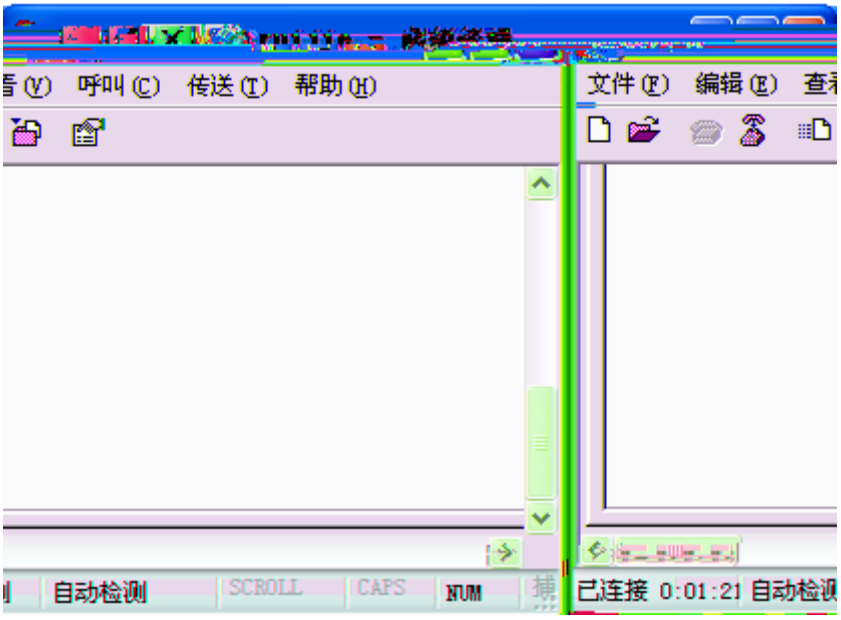
. 4-3



5) XF ÕB$ >+|M']K^ • àF Õ,´ =0 È … + <.ž Ê > 9JÞ È3+5 i * ²

6) . 4-4 p/j,´+|M' . È X ÷F Õ & ¯+X ù 0 ?]F9 F Õ ¯+X,´ b Ä

. 4-4



4.2 Ô n

Ô ø é ó Ó

„ Ô ' j _ V u 6 Õ ` Ä

„ +e$À4ïF Õ _ V!".ž Ä

„ +e$À4ï •+e$À > È ' " _ V ' •+e$À4ï Ä

„ Ë+e+e » _ V > Ô ' j?±"r,´ 08$ Ä

„ G}5ž+e56F Õ _ V!".ž ÈG}5ž ¯+X,´4ø1 Ä _ PC Å _ V "4ÿ ƒ 0 ÈG}5ž ò _ V " ¼ @Aî5ž Ä

Ô d é ó Ó c 1 d

:+e > È 0 -F >| ² ; ð È Añ >M'G}5ž Œ,´!" hF >| Ö

„ G}5ž ¯+X,´4ø1 +|M' _ V 9 ƒ Ÿ Ä

„ Aî 7,´ 7/j&Ÿ _ V!" h Ä

5 ñ 0 ¢ õ

5.1 ñ 0 ×

Ce

Aî 7 4 ¾F >|(æ 1 & È+X g FJE÷?ò 4/ý 7/j&Ÿ- × k j ¼ 4 Q ‡,´(æ 1 Ä

„ k j Status *)à4Ò8¢ & ÈB$ >3+5 9 uLÌ *)à È ,« • `1Ñ*6EŸ &F >| -; È .žAÔ uLÌ ¦ ÂL” Ä

„ k j Status *)àTô8¢ & ÈB$ >3+5 $Y ÖCµE÷ zA–$Y Ö1y È ¡ ý3+5 F >| W7- È v3+5 F 5 5 F >| È ,« • `1Ñ*6 EŸ &F >| -; È .žAÔ uLÌ ¦ ÂL” Ä

„ k j Status &Ÿ 0-$L &ñ F j4Ò8¢>˜ > *)à uLÌ È Ä ð 2 h Ï È õ?± &?± Ý+e ð Ä

„ k j,´ PWR1/PWR2 &Ÿ *)àTô8¢ & ÈB$ > = _ 1 ƒ }+e$À » ' ÈM0 $ 'ł“.ž ,´ +e$À Q ‡ Ä

„ k j,´ PWR1/PWR2 &Ÿ *)à4Ò8¢ & È x ð +e$À4ï56 _ V • È¦ !“ h Ë+e ×9 • ¼ Ë+e L NÈ È IB$ >-(Ä ,´+e$À *)à uLÌ È ÄB ú &,´ $ ' Ä

q p Status &¥ ^Aô =1×*< Õ73 A %Gý+^ !FUL &÷ Õ73+^ Ä Ð ƒAô = >9 ^ µ+^ !FUL &÷ Õ73 , ¸)æ q p Status &¥ 6-*L &÷ ¬ C ” Ä {LÒ)æB— >

CLI w W

Aî 7 _ 1FJE÷F >| - >|,´-(£ - - ×3+5 ,´ 4/ý(æ 1 Ä 5 Ö

„ k j,´ Œ(æ 1 Ä

„ 1 ,´G}5ž Ÿ ¼(æ 1 Ä

„ Nþ w ¼+e$À,´ Œ(æ 1 Ä

„ 3+5 ,´$Y Ö(æ 1 Ä

a - Ý ³ B- ø?÷ E RG-S5760-L 31 M Ú ˜ p Gƒ5¤ = • F >

5.2] ¢ õ

bCã x ž é ¢ õ

„ \Aî 7 COCS “' ,´Nþ w Q ‡ 9 uLÌ- × ' È 0 +O uLÌ È 6 9-(Ä,´ GÂ Ä

„ º uLÌ,´Nþ w $ ' ¹ È ¦ ' : 8 ł,´ × ñ Ä

„ K13WNþ w Q ‡,´ ® =7a=ê M Ä

3#³2´"shG•K@ §5•5 Ò ɑ =ɑG ° TÀTÉ1e$2 ´ šsX PÁ‹ Õ@N£è..c‘‘’ÒƒäÃÿD C £³2´`³cÁÒ3 L NôÆ

\ ¢ C - SFP+ ± y *f*

\ œ (i ž Ô ' j Q ‡,´ Õ 2« » Ë ¶-(ÄG} ‡ ¯+X,´ 7 v SFP+ Q ‡ È+X g i ž ÎLu ¯+X,´?±"r • 8*6,´F9 -(Ä ,´ Q ‡ Ä \ · "] Ë ¶G 6 7 v SFP+ Q ‡,´ » ' ¼ ° _ ò ,´B$ > Ë ò63 ÄB 4ö,´ ° _ 7 7B' ò63 É y Q ‡ >K 56 ¹ >õ { ¼

= C-1 - SFP+ ± l ¹ x ê ± ×

» '	# K¯ (nm)	DDM (Yes/No)	y4Ô 2« »	F1 y j dbm		Õ f y j dbm	
				0 ?	0 W	0 ?	0 W
XG-SFP-SR-MM850	850	Yes	J Q	-5	-1	-7.5	0.5
XG-SFP-SR-SM1270-BIDI	1270	No	J Q	-3	4	-9	0.5
XG-SFP-SR-SM1330-BIDI	1270	No	J Q	-3	4	-9	0.5
XG-SFP-LR-SM1270-BIDI	1270	No	… Q	-6.5	0.5	-14.4	0.5
XG-SFP-LR-SM1330-BIDI	1330	No	… Q	-6.5	0.5	-14.4	

X G

				400(OM1)	66m
XS-SFP-LR	LC	… Q	9/125	N/A	10km

a / Ä XG-SFP-ER-SM1550 Â XG-SFP-ZR-SM1550 B- 5 µ+^.#D /ñ •4ÚF Û ¸ ƒFV F W • • Û l pEýE³ > ¸ Ò W • Û l1%,º • Õ)½] Ä L1• Ä -1dBm ¸ ÊB ^ W •,º Û l1% ÖF8 ‰,º>¦ ž ¸ µ ¬ Û l1%,º • Õ)½ E Ä -1dBm >

a • W • ” Ä%ö • : ž ¸B-# E+^-r ¿ ž ¸ ÊFµ ƒ-*?ü •$Æ >

a p ¼ Ú • W •,º$;#7 ¸B- × û A÷ ^ `F Û •4Ú4õ ,- @Lh N- >

= C-3 » ¥ é - SFP+ Ž § ± ¹ Y = u

» '	Q ‡2« »	F Õ ˜2« »	4ï56K¯ Ö (M)	, ƒ 4 ï ´ (AWG)	žFO)· (Gb/s)	_ 1 DDM (Yes/No)
XG-SFP-AOC1M	9$À y56	SFP+	1	\	10.3125	Yes
XG-SFP-AOC3M	9$À y56	SFP+	3	\	10.3125	Yes
XG-SFP-AOC5M	9$À y56	SFP+	5	\	10.3125	Yes

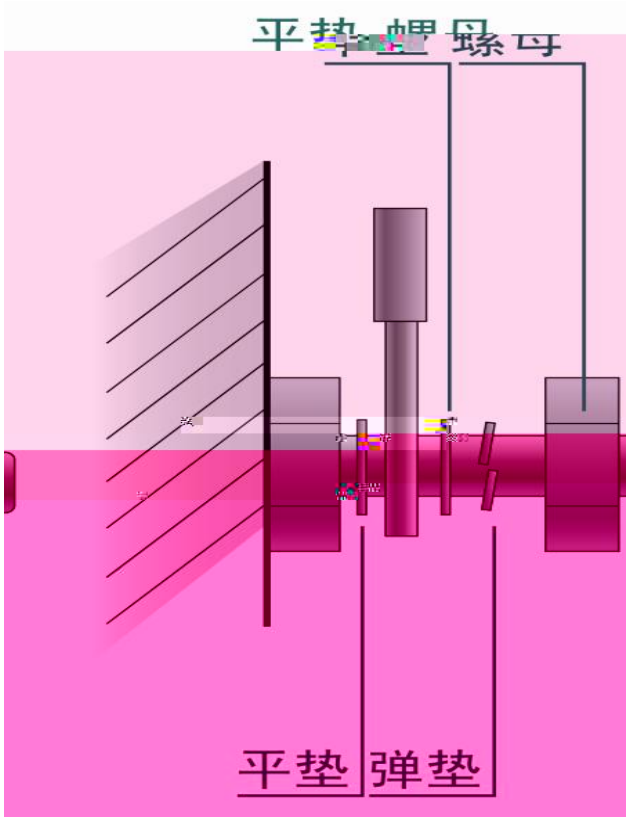
a µ+^ SFP+4õ5< , CM6?·NÓ L,ºF Û4õ5< ¸ M6?· À4õ5< Z1% ¸ › f / Ê Û 2± Á,ºAô =1% ¸© % Ô)æ Z `1% ,º È6Š >

= C-4 - BIDI ¯ ± * y ƒ

FO)·/D /ë	G}) » '
7 v /300m	XG-SFP-SR-SM1270-BIDI XG-SFP-SR-SM1330-BIDI
7 v /10km	XG-SFP-LR-SM1270-BIDI XG-SFP-LR-SM1330-BIDI

a BIDI • W • ûN±Gƒ / µ+^ ¸ Á ¸ 61% µ+^ ¼ XG-SFP-SR-SM1270-BIDI ¸ L 61% g ûN± µ+^ XG-SFP-SR-SM1330-BIDI >

. E-4 +e56 * Ê/j93 .



„) ¾E³.œ,´+e$À4ï È Ä X1 Õ 4LtF)+e56F >| * Ê È Lb!' X1 Õ 4 ú+e56 : ×+O Ä Ë ×

„ B' /+X8 k=êJ¹ •3W * Õ4ï1 € Ä

„ < 02« » Ã < 0 é AC 4ï,´+e$À4ï Ä v ~ @+e56 • È+e56 • µ,´+e56 Ä$5#1 Ã £-$ Ä

„ 4ï “,´5 ~ Ä 9'—>˜ E-1 F >| Ä

>˜ E-1 4ï “ v ~)'—>˜

+e56 •-$ ´ Ä mm Å	5 ~L$D Ä mm Å
10	80~150
10~30	150~200
30	200~300

„ + …+e56C 4ï F65 v ~ = Ç ƒ5 Ä

„) ¾ » Õ ç »1 €2«,´ Õ4ï1 € × Ä ²0ª"D 0 £1y ÅÈ>õG} & ç »1 €,´H ŽG 6 =?±Mb X1 € × FM’ Ä

\ ¢ F