Sbjlink
Subject Link

Industrial Managed Gigabit Ethernet Switches

RPT-2012X/XP-4F-T-X1 Series

Hardware Installation Guide

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Package Check List
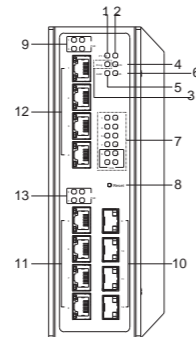
Inside the package you will find the following items:

■ Industrial Managed Gigabit Ethernet Switch x 1
■ 4-Pin 5.08mm Lockable Terminal Block (Already mounted to the device) x 1
■ 5-Pin 5.08mm Lockable Terminal Block (Already mounted to the device) x 1
■ DIN-Rail Kit (Already mounted to the device) x 1
■ Protective caps for all SFP and PoE ports (Depend on purchased model)
■ Installation Guide x 1

⚠ Never install or work on electrical or cabling during periods of lightning activity. Never connect or disconnect power when hazardous gases are present.

⚠ Warning:Hot Surface Do Not Touch. RESTRICTED ACCESS AREA: The equipment should only be installed in a Restricted Access Area.

⚠ Caution: CLASS 1 LASER PRODUCT. Do not stare into the laser!

⚠ This equipment should be installed indoor and not connect directly with equipment installed outdoor.
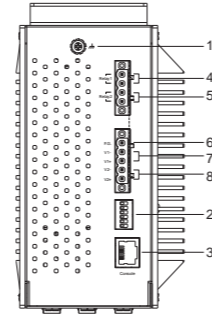
Product Layout

Front View

RPT-2012X-4F-T-X1
RPT-2012XP-4F-T-X1

*RJ45 function is optional with model

1. PWR1 LED
2. PWR2 LED
3. Ring LED
4. RUN LED
5. Alarm LED
6. Ring Master LED
7. RJ45/PoE/SFP Ports LEDs
8. Reset button
9. PoE LEDS
10. 10G BASE-X SFP Slots
11. 10/100/1000 BASE-T(X) RJ-45 Ports and/or 10/100/1000 BASE-T(X) PoE RJ-45 Ports
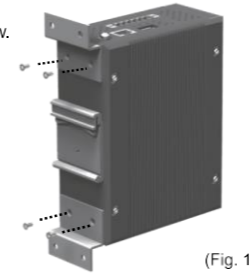

Top View

1. Grounding Screw
2. DIP Switches
3. RS-232 Console
4. Relay Output 1 with current carrying capacity of 1A@24 VDC (Normal Open)
5. Relay Output 2 with current carrying capacity of 1A@24 VDC (Normal Open)
6. Frame Ground
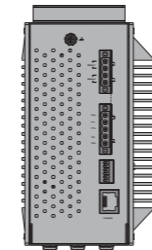7. Terminal for Power 1
8. Terminal for Power 2

Installation Overview

The device's appearance is as in the figure below.

1. If you have purchased the wall mount kit, proceed to place the screws on the back of the device as show in (Fig. 1).

2. Although internal grounding has been done inside, in order to ensure overall maximum performance and protect your device, it is still strongly advised to ground the device properly; hazardous ESD can come into contact and damage your equipment. On the power terminal block, there is a terminal for Frame Ground, you can choose whether to connect it to the grounding or you may opt to connect to the grounding screw next to the terminal block (the one chosen should be connected at all times) (Fig. 2)
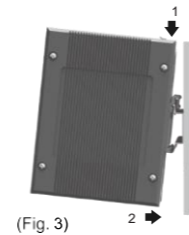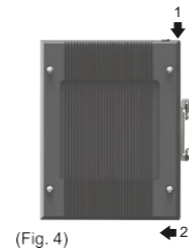
(Fig. 1)

(Fig. 2)

3. Wall mount Screw spec: M3*0.5P
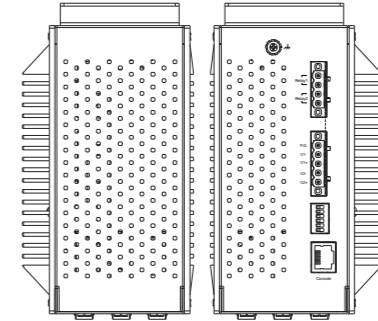   Wall mount Screw specification: M3; screw depth:4.7mm(Max); screws x 4pcs

4. You can then choose whether to plug in the other peripheral ports at this point or do it later depending on the actual location of the device or level of comfort for performing such operation.
   Remeber to plug in the protective caps for the unused SFP and PoE ports.

(Fig. 3)

5. Once the plate has been firmly put in place, proceed to mount the whole device as shown in (Fig. 3).Proceed to (Fig. 4) if you want to remove the device from DIN-Rail.

6. Next we can then proceed to connect the device to the LAN (switch or PC, depending on the case), take care on using the RJ-45 connector; after this we can then proceed to the device's settings

(Fig. 4)

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7. Din Rail Screw spec: M4*0.7P
   Din Rail Screw specification: M4; screw depth:4.1mm(Max); screws x 3pcs

■ The opening to the sides are for the device's heat dissipation please never obstruct or cover them with any objects or try to insert them through it.

■ This switch's factory IP by default is 10.0.50.1 you can access the device by its Web UI once it is connected to a physical network (or using Management Utility, for more information on Management Utility, please refer to its manual). Please be aware that the PC needed for this procedure needs to be in the same subnet, or you may refer yourself to the device User's Manual.

LED Indicators

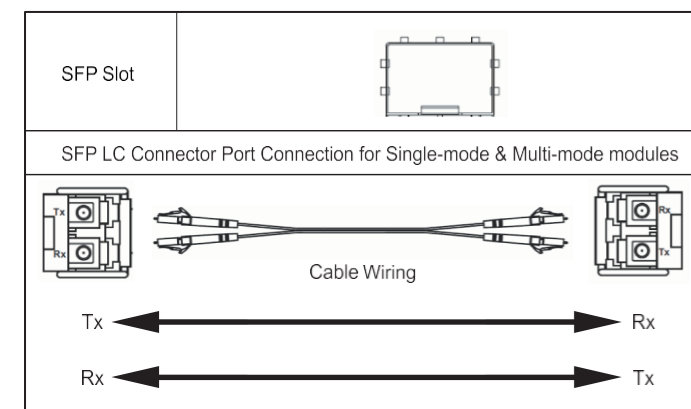| Name	Color	Status	Message
P1	Green	On	Power is being supplied through this power input
P2		Off	Power is not supplied through this power input
ALM	Red	On	Alarm is triggered by user defined events
		Off	Alarm is not triggered by user defined events
RUN	Green	Blinking	AP firmware is running normally
		On/Off	System is not ready or halt
Ring	Green	On	All the Rings are running normally
		Blinking	Ring is in protection state
		Off	Ring is disabled
R.M.	Green	On	The device is a Master of the Ring
		Off	The device is a Slave of the Ring
SFP	Green	On	Port is linked
		Blinking	Data is transmitting on this port
		Off	No data is transmitting on this port
PoE	Amber	On	Power is being supplied to a Powered Device (PD)
		Off	Power is not supplied to a PD
LAN	Amber	On	Ethernet is connected at 1000Mbps
		Blinking	Ethernet is connected at 100Mbps
		Off	Ethernet is connected at 10Mbps
	Green	On	Ethernet is connected
		Blinking	Data is transmitting on this port
		Off	Ethernet is disconnected

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Power Requirements

■ Power input : 12-57 VDC, 2.2A Max

　　　　　　　45-57 VDC, 3.2A Max (For 802.3af models)

　　　　　　　51-57 VDC, 5.2A Max (For 802.3at models)

■ Alarm output : 1A@24A VDC for signal use only

Pin Assignments and Connections

10/100/1000BASE-T(X) Ethernet, PoE and RS-232 Console Pinouts

RJ-45	1 ⊓⊓⊓⊓⊓⊓⊓⊓ 8							
10/100BASE-T(X)								
Pin	1	2	3	4	5	6	7	8
Signal	T x +	T x -	R x +			R x -		
1000BASE-T								
Pin	1	2	3	4	5	6	7	8
Signal	BI_DA+	BI_DA-	BI_DB+	BI_DC+	BI_DC-	BI_DB-	BI_DD+	BI_DD-
PoE								
Pin	1	2	3	4	5	6	7	8
DC	V+	V+	V-			V-		
RS-232 Console								
Pin	1	2	3	4	5	6	7	8
Signal			Tx	GND	GND	Rx		

1000BASE-X Fiber Optics SFP Slot

SFP Slot

SFP LC Connector Port Connection for Single-mode & Multi-mode modules

Cable Wiring

Tx ◄──────► Rx

Rx ◄──────► Tx

Caution
The SFP slot should be used in conjunction with a MSA compliant optical transceiver.

DIP Switch

	DIP Switch			Function
1	ON			Ring active
	OFF			Ring inactive
2	ON			Master
	OFF			Slave
3	ON	4	OFF	Compatible Ring
	OFF		ON	iA-Ring
	OFF		OFF	ERPS Ring
5*	Reserve for future use			
6	Reserve for future use			

*Settings are applied when the device is restored to default.
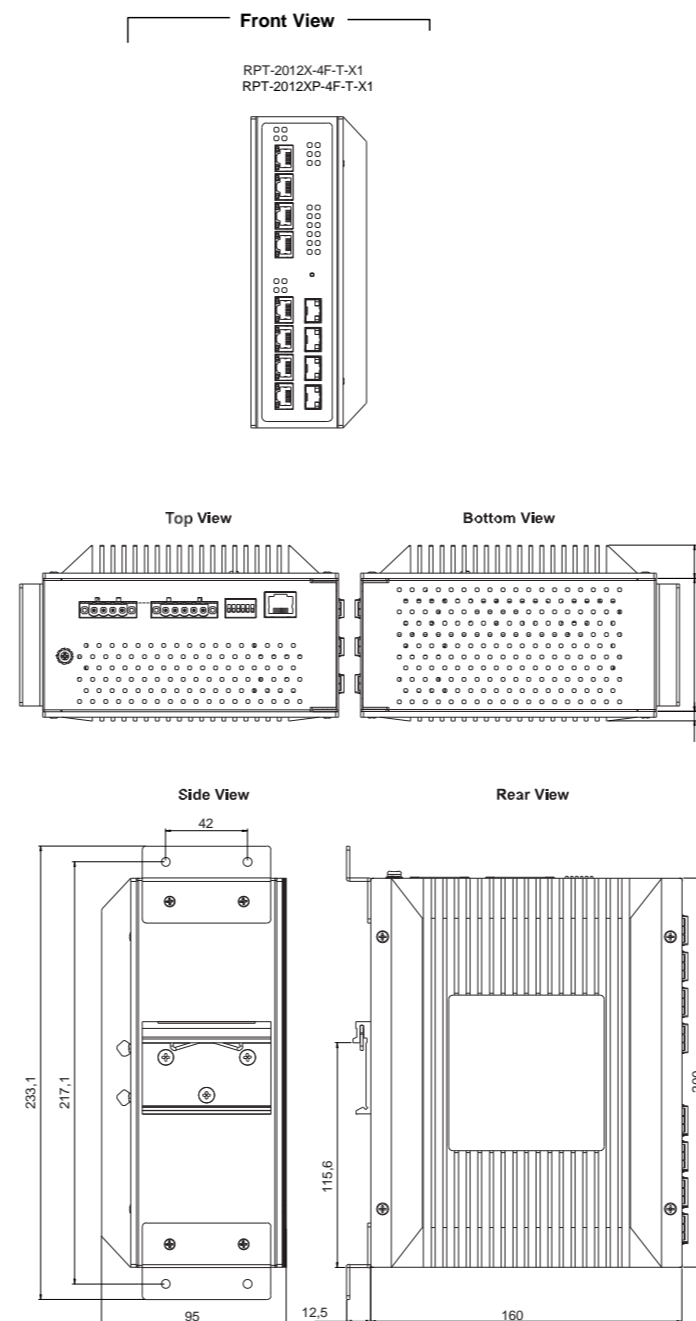
Field Maintenance and Service

If the device requires servicing of any kind, you may need to disconnect and remove it from its mounting. The initial installation should be done in a way that makes this as convenient as possible.

■ Voltage/Power lines should be properly insulated as well as other cables. Be careful when handing the so as to not trip over

■ Do not under any circumstance insert foreign objects of any kind into the heat dissipation holes located in the different faces of the device. This may not only harm the internal layout but might cause harm to you as well.

■ Do not under any circumstance open the device for any reason. Please contact your dealer for any repair needed or follow the instructions on section of your User's Manual.

⚠ Attention

1. PoE considered a Network Environment 0 per IEC TR62101, and thus the interconnected ITE circuits may be considered SELV. The installation instructions clearly state that the ITE is to be connected only to PoE networks without routing to the outside plant.

2. Suitable for installation in Information Technology Rooms in accordance with Article 645 of the national Electrical Code and NFPA 75.

3. This equipment is not suitable for use in locations where children are likely to be present.

4. Connect all power cords to a properly wired and grounded electrical outlet.

5. This product is intended to be supplied by a Listed(Certificate) power adapter, rated 1) 12-57Vdc, 2.2A minimum (for Non PoE), 2) 45-57Vdc, 3.3A minimum (for 802.3af), 3) 51-57Vdc, 5.2A minimum (for 802.3at), Tma 70 degree C minimum and altitude 2000m minimum, if need further assistance, please contact Subject Link Inc. for further information.

6. For installing the optical transceiver, please select the one (Certificate) rated 3.3V, labeled or marked "Laser Class I" or equivalent for optional transceiver product. You can contact sales@sbjlink.com for assistance on accessories.

Mechanical Dimensions (Unit=mm)

Front View

RPT-2012X-4F-T-X1
RPT-2012XP-4F-T-X1

Top View　　　Bottom View

Side View　　　Rear View

※ The wall mount kit illustrated in this document is for reference only and is not included in the package.