PROmesh B12 PoE

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【Package Checklist】

Please check the integrity of package and accessories while first using the switch.

1. Industrial Ethernet switch
2. Quick installation guide
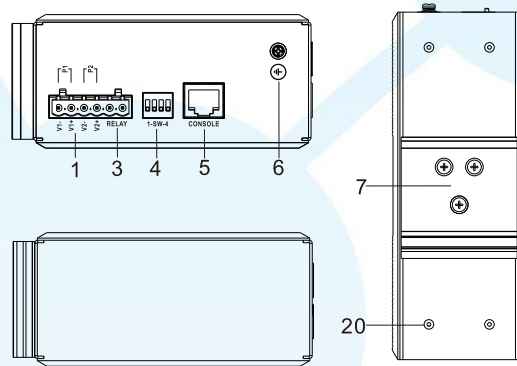3. DIN-Rail mounting attachment
4. CD

If any of these items are damaged or lost, please contact our company or dealers, we will solve it ASAP.
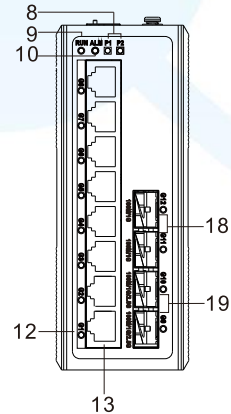
【Product Overview】

PROmesh B12 PoE (8 Gigabit PoE copper ports + 2 Gigabit SFP + 2 2.5G SFP, 24VDC redundant power supply, 120W PoE power consumption)

## 【Panel Design】

➢ **Top view, bottom view and rear view**

➢ **Front view**

1. Terminal blocks for Power Supply P1/P2 Input
3. Terminal blocks for relay alarm output RELAY
4. DIP switch
5. Console port
6. Grounding screw
7. DIN-Rail mounting kit
8. Power indicator
9. Running indicator (RUN)
10. Alarm indicator (ALM)
12. Ethernet port indicator (G1-G12)
13. 10/100/1000Base-T(X) Gigabit PoE copper port (G1-G8)
18. 100/1000Base-X SFP slot (G11-G12)
19. 100/1000/2.5GBase-X, SFP slot(G9-G10)
20. Wall-mounting location hole

【Mounting Dimension】

Unit: mm
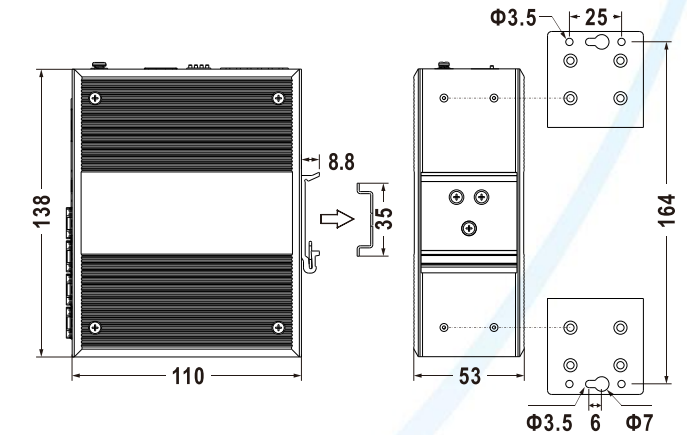
⚠ **Notice Before Mounting:**

- Don't place or install the device in area near water or moist, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before power on, first confirm the supported power supply specification to avoid over-voltage damaging the device.
- The device surface temperature is high after running; please don't directly contact to avoid scalding.

【DIN-Rail Mounting】

The product adopts 35mm standard DIN-Rail mounting which is suitable for most industrial scenes, mounting steps as follows:

Step 1 Check if the DIN-Rail mounting kit is installed firmly.

Step 2 Insert the bottom of DIN-Rail mounting kit (one side with spring support) into DIN-Rail, and then insert the top into DIN-Rail.

Tips:
Insert a little to the bottom, lift upward and then insert to the top.

Step 3 Check and confirm the product is firmly installed on

DIN-Rail, then mounting ends.

【Disassembling DIN-Rail】

Step 1   Power off the device.

Step 2   After lifting the device upward slightly, first shift out the top of DIN-Rail mounting kit, and then shift out the bottom of DIN-Rail, disassembling ends.

⚠ **Notice before power on:**

● Power ON operation: First insert the power supply terminal block into the device power supply interface, then plug the power supply plug contact and power on.

● Power OFF operation: First, remove the power plug, then remove the wiring section of terminal block. Please pay attention to the above operation sequence.

【DC Power Supply Connection】
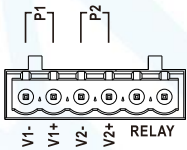
The DC device of the series provides 6-pin 5.08mm pitch power supply terminal blocks and power supply occupies the left 4 pins. It supports two independent DC power supply systems, P1 and P2. The series of device supports redundant power supply, two power supply can work at the same time. The device will still run non-stop when one power supply fails. The pin definitions of power supply are shown in the left figure. This series supports 3 different power supply ranges. Please notice the corresponding power supply type of the device in case it damages the device.

➢ **24VDC redundant power supply**

The power supply support anti-reverse connection, which cannot power the device but won't damage it. The definitions of power pin are shown in the figure above, and the power input is 24VDC.

【Relay Connection】
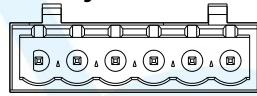
This device provides 6-pin 5.08mm pitch terminal blocks, relay occupies the right 2 pins. Relay terminals are a set of normally open contacts of the device alarm relay. They are open circuit in the state of normal non alarm, closed when any alarm information occurs. For example, they are closed when powered off, and send out alarm. The product supports 1 relay alarm information output that can output DC power supply alarm information or network abnormality alarm. It can be connected to alarm light or alarm buzzer or other switching value collecting devices, which can timely inform operators when the alarm occurs.

【DIP Switch Settings】

The series of devices provide 4-bits DIP switch for function setting, where "ON" is enable valid terminal.

The definitions of DIP switch are as follows:

No	Definition	Operation
1	Restore Factory Settings	Set the DIP switch to ON, the device will root automatically and restore to factory settings, then turn off the DIP switch.
2-4	Reserved	—

【Console Port Connection】
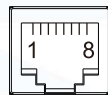
The device provides 1 program debugging port based on RS-232 serial port which can conduct device CLI command management after connecting to PC. The interface adopts RJ45 port, the RJ45 pin definition as follows:

Pin No.	2	3	5
Definition	TXD	RXD	GND

【Checking LED Indicator】

The device provides LED indicators to monitor its operating status, which has simplified the overall troubleshooting process. The function of each LED is described in the table below:

LED	Indicate	Description
P1/P2/PWR	ON	Power supply is running normally
	OFF	Power supply is disconnected or running abnormally
ALM	ON	Power supply or port link has alarm
	OFF	Power supply and port link have no alarm
RUN	ON	Device is not started or abnormal
	Blinking	Blinking 1 time per second, system is running normally
	OFF	The device is powered off or the device is abnormal.
LINK (G1-G12)	ON	Ethernet port has established a valid network connection
	Blinking	Ethernet port is in an active network status
	OFF	Ethernet port has not established valid network connection
PoE (G1-G8)	ON	POE port is powering other PD devices normally
	OFF	POE is disabled or disconnected

【Logging in to WEB Interface】

This series of devices supports WEB management and configuration, and computers can access devices through Ethernet interfaces. The way of logging in to device's configuration interface via IE browser is shown as below:

Step 1   Configure the IP addresses of computer and the device to the same network segment, and the network between them can be mutually accessed

Step 2 Enter device's IP address in the address bar of the computer browser: https://192.168.1.254

Step 3 Enter device's username and password in the login window as shown below.

Username	admin
Password	••••••••
	Login

Step 4 Click the "login" button. Change the initial password when logging into the device for the first time, after that, relog into the device to access the device's Web interface.

Note:

- The default IP address of the device is "192.168.1.254".
- The default user name and password of the device are "admin".
- When logging in to the device for the first time, the system will prompt to change the initial password of the default user; The length of the new password string must be greater than or equal to 8 and be composed of two or more kinds of uppercase letters, lowercase letters, numbers and special characters.
- If the user name or password is lost, the factory settings can be restored through management software of the device; or make a physical loopback between Port 1 and Port 2 within the first minute when the switch restarts.
- Please refer to user manual for specific configuration method of logging in to WEB interface and other configurations about network management function.

【**Specification**】

Panel	
Gigabit PoE copper port	10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotunning. PoE power supply pin: V+, V+, V-, V- correspond to pin 1, 2, 3, 6. The maximum output power of single port: 30W
Gigabit copper port	10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotunning
Gigabit SFP slot	100/1000 Base-X self-adaption or forced mode, SFP slot
2.5G SFP slot	100/1000/2.5GBase-X self-adaption or forced mode, SFP slot
Console port	CLI command management port (RS-232), RJ45
Alarm interface	6-pin 5.08mm pitch terminal blocks, alarm occupies the right 2 pins, supports 1 relay alarm information output, and the current load capacity is 1A@30VDC or 0.3A@125VAC
Indicator	Running indicator, alarm indicator, power supply indicator, interface indicator, PoE indicator
Switch Property	
Backplane bandwidth	30G
Packet buffer size	4Mbit
MAC Address Table	8K
Power Supply	

Access terminal block	6-pin 5.08mm pitch terminal blocks, power supply occupies 4 pins
Power input	24VDC PoE, anti-reverse connection, redundant backup, built-in 5A overcurrent protection
Power Consumption	
No-load	≤5.76W@24VDC
Full-load	≤ 12W@24VDC (without PoE load) ≤ 132W@24VDC (with 120W PoE load)
Working Environment	
Working temperature	-40~75℃
Storage temperature	-40~85℃
Working humidity	5%～95% (no condensation)
Protection grade	IP40 (metal shell)