

Equipment user manual

Tips: Please read the user manual carefully in case the equipment cannot be used or damaged due to improper operation.

Equipment safety information

Please strictly follow the instructions in this manual, otherwise any improper operations may unintentionally damage the product or even cause personnel injury.



Special attention terms :

1. Be sure to keep the input and output pigtail end faces clean before use. If the output end face dirty, it is easy to burn the output pigtail end face and make the output power weaker. When cleaning the fiber end face or inserting the patch cord, turn off the input light first.
2. When in use, please do not stare at the fiber end face to avoid eyes injured by laser.
3. Please avoid anything especially liquid into this equipment, otherwise the equipment may be failure or damaged.
4. Please avoid using in below environment.
 - Direct sunshine or high temperature
 - Environment with drastic changes in temperature
 - Environment with lots of dust or wet.
 - Environment with strong electric or magnetic field
 - Environment with corrosive gas, flammable explosive gas, chemical gas.
5. Please cut off the power sources and contact us for advice when facing below issues:
 - When rain or other liquid into equipment
 - Equipment fell from a high place and the chassis broke.
 - Equipment exudes a burning smell.
 - Equipment could not work.



If you have any problem, please contact us. Do not disassemble the product by yourself, otherwise it will cause irreparable damage.

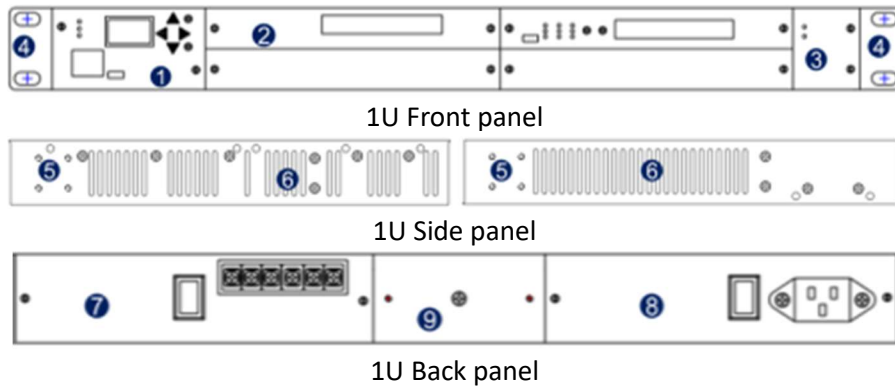
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1. Managed Chassis Introduction

1.1 Managed Chassis appearance description

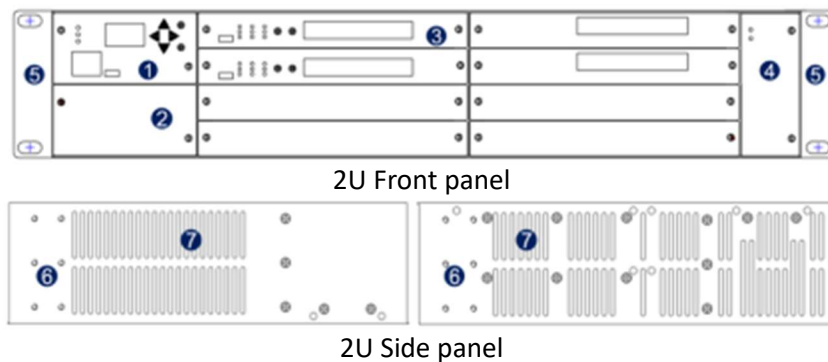
1.1.1 1U Managed Chassis

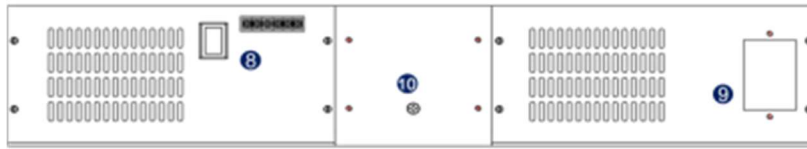


Description:

- (1) NMU Main control card.
- (2) Service card slot, maximum support 4 hot swap service cards.
- (3) Fan slot, support for fan hot swap and independent replacement.
- (4) Stretchable lug.
- (5) Lug installation position.
- (6) Side vent.
- (7) Power 1 slot, can plug in AC/DC power supply, support hot swap.
- (8) Power 2 slot, can plug in AC/DC power supply, support hot swap.
- (9) Grounding screw.

1.1.2 2U Managed Chassis



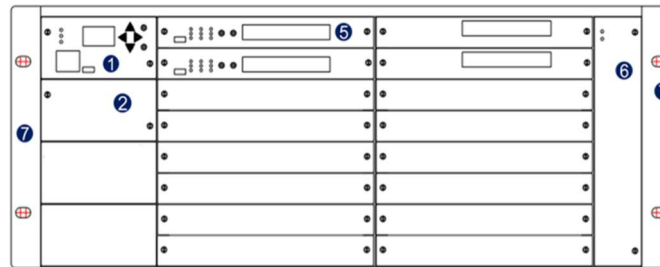


2U Back panel

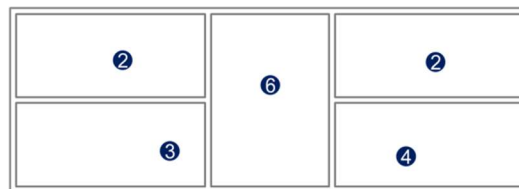
Description :

- (1) NMU Main control card slot
- (2) Expansion slot, support eight Ethernet switch cards or other cards.
- (3) Service card slot, maximum support 8 hot swap service cards.
- (4) Fan slot, Support for fan hot swap and independent replacement.
- (5) Stretchable lug.
- (6) Lug instillation position.
- (7) Side vent.
- (8) Power 1 slot, can plug in AC/DC power supply, support hot swap.
- (9) Power 2 slot, can plug in AC/DC power supply, support hot swap.
- (10) Grounding screw.

1.1.3 4U Managed Chassis



4U Front panel



4U Back panel

Description :

- (1) NMU Main control card slot
- (2) Expansion slot, support eight Ethernet switch cards or other cards.
- (3) Power 1 slot, can plug in AC/DC power supply, support hot swap.
- (4) Power 2 slot, can plug in AC/DC power supply, support hot swap.
- (5) Service card slot, maximum support 16 hot swap service cards.
- (6) Fan slot, Support for fan hot swap and independent replacement
- (7) Stretchable lug.

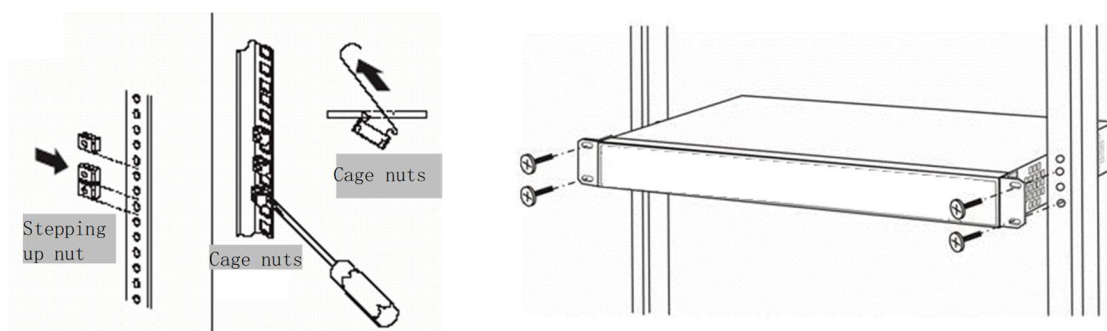
1.1.4 Managed Chassis component description

Component 1	Power supply card 1
Component 2	Power supply card 2
Component 3	Fan card
Component 4	Main control card, LCD screen, 10/100M Ethernet interface, 100/1000M SFP interface

1.2 Managed Chassis correlation parameters

	Parameters	Unit	Specifications
Environment Parameter	Working temperature	°C	-10~ 60°C
	Storage temperature	°C	-20°C~ 75°C
	Relative humidity temperature	°C	5% ~ 95% No condensation
Size	1U	mm	482.6W×300D×44.5H
	2U	mm	482.6W×300D×86H
	4U	mm	482.6W×300D×176H
Power Supply	AC	V	85~264, 50~60hz
	DC	V	36~72
Consumption	1U	W	< 50 (Max)
	2U	W	< 100 (Max)
	4U	W	< 200 (Max)

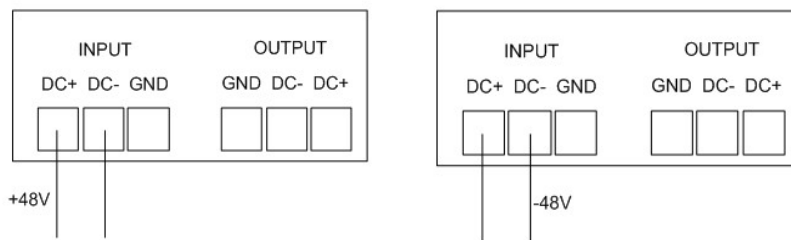
1.3 Managed Chassis installation



- (1) Please fix the lugs on the managed chassis and make sure the screws have been tightened, to avoid the device dropping to the ground.

- (2) Please make the managed chassis inside the cabinet and make sure the screws have been tightened, to avoid the device dropping to the ground.
- (3) Please insert AC/DC power source correctly according to the interface type of power card.
- (4) Please check the screws of all boards to make sure the screws have been tightened, to avoid equipment cannot work well because of board loose.
- (5) The cooling air outlets are located on either side, so make sure air circulation of both sides is normal.
- (6) Please keep the slot room clean, constant in temperature.

Note:
DC power supply wiring instructions



2. Function Cards description

2.1 NMU Main Control Card

Default IP address is 192.168.1.200

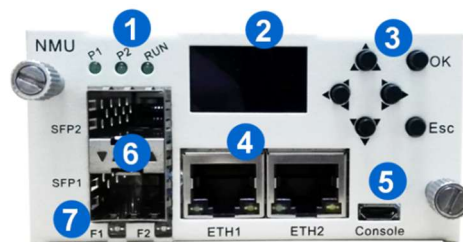
Default username for web interface: admin

Default password for web interface: admin

2.1.1 NMU function

The Main control card is used to manage network by supporting management interface of Ethernet communication. With the main control card, we can see current status, work performance of all cards and can set relevant functions of all cards.

2.1.2 Card appearance



Indicator introduction:

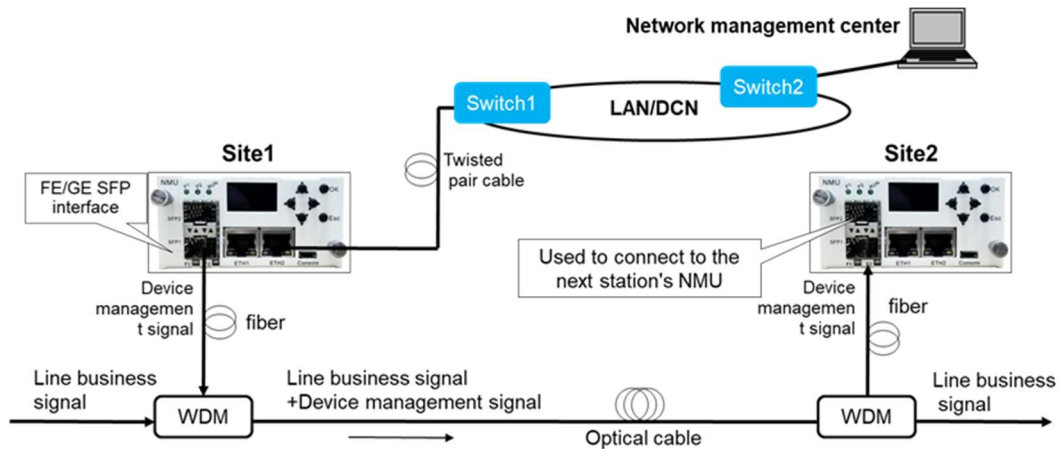
Indicator	Notes	Normal state	Alarm state
P1	Power 1	Green light	Light-off
P2	Power 2	Green light	Light-off
RUN	NMU Run	The light flashes every 1	Light-off or flashes irregularly
F1	SFP1	The light flashes	Light-off
F2	SFP2	The light flashes	Light-off

Communication interface:

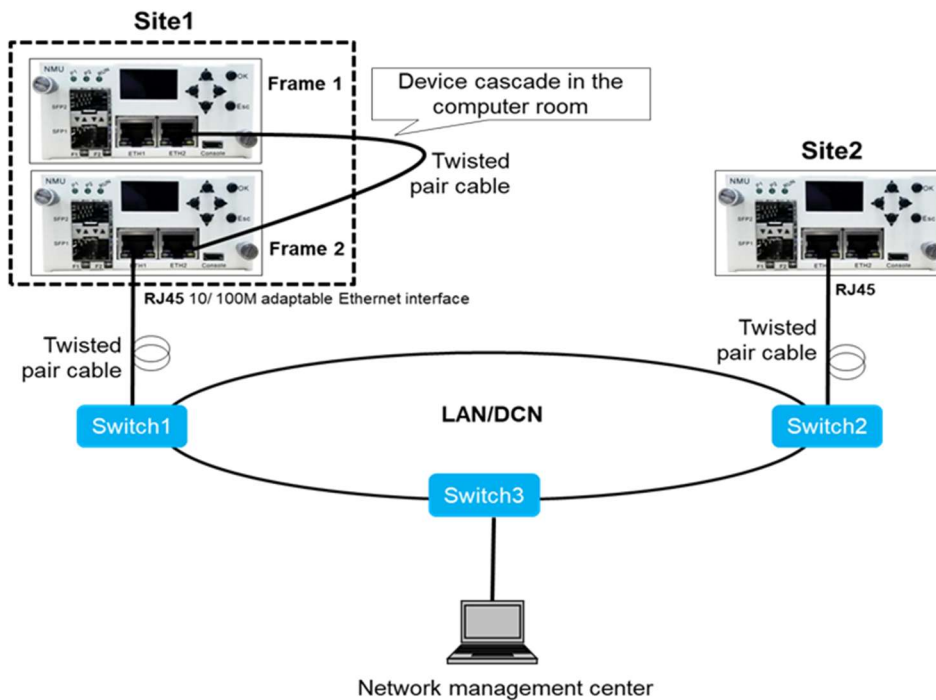
Interface name	Interface function	Interface type
ETH	Internet communication	RJ-45
Console	Upgrade interface	Micro USB

2.1.3 NMU instructions

- The equipment management signal and business signal use the same optical fiber transmission.



- Equipment management signal and business signal are transmitted independently.



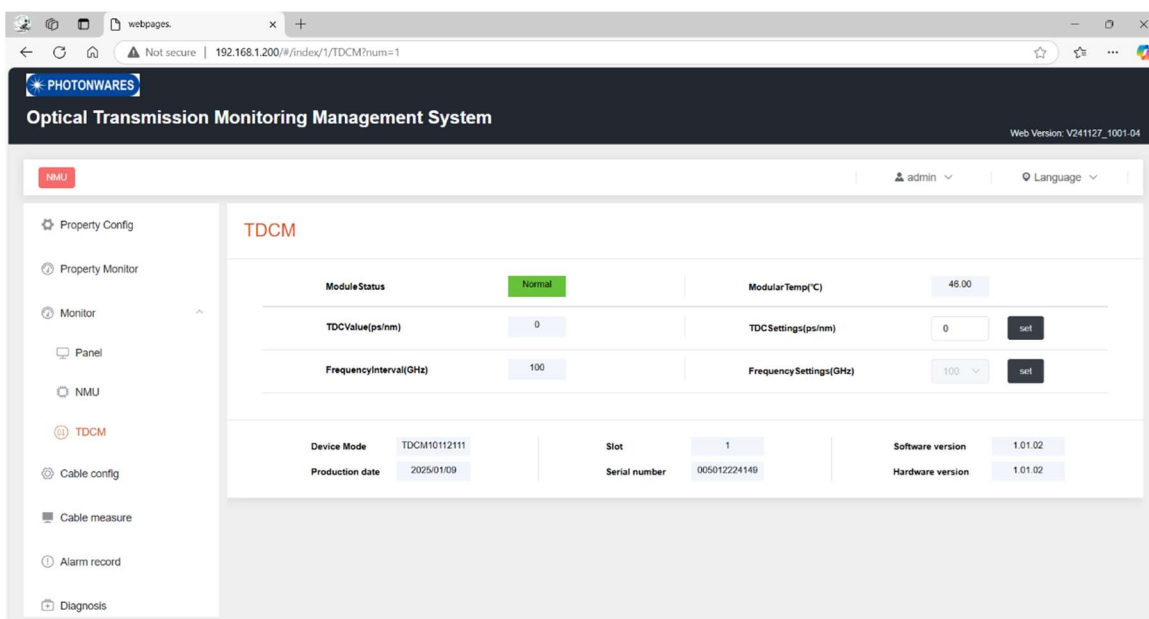
2.2 Tunable Chromatic Dispersion Compensation Module

2.2.1 Card function

This TDCM series of modules is designed to compensate chromatic dispersion for DWDM network systems by directly inserted into the transmission and receiving fiber lines. It features good linearity. It is based on changing the etalon cavity spacing to effectively compensate for the dispersion problem of the signals in the DWDM optical communication system after long-distance transmission of the optical fiber.

2.2.2 Card Control

The module supports web GUI control. After logging in to the web interface, please click 'Monitor' on the left panel, and the choose 'TDCM'



Module status, the working status of the TDCM module. It has 2 values 'Normal' and 'Error'.

Module Temp, the internal temperature of TDCM.

TDC Value (ps/nm), the current dispersion value.

TDC Settings (ps/nm), the setting of dispersion value.

Frequency Interval (GHz), the channel spacing of the DWDM systems.

Frequency Settings (GHz), the setting of channel spacing.

2.2.3 Set Dispersion Value

To change the dispersion, click the 'Set' button of the TDC Settings

TDCSettings(ps/nm)	<input type="text" value="0"/>	<input type="button" value="set"/>
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After clicking, it will change to 'Send', type in the required dispersion value and click 'Send' to set the new value

TDCSettings(ps/nm)	<input type="text" value="200"/>	<input type="button" value="send"/>
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There will be a message box popping up, just click the green button to confirm the setting.

warning

Are you sure you want to modify TDC?



After a few seconds, the TDC value will change to the new settings:

TDCM

ModuleStatus	Normal	ModularTemp(°C)	46.20
TDCValue(ps/nm)	200	TDCSettings(ps/nm)	<input type="text" value="200"/> <input type="button" value="set"/>
FrequencyInterval(GHz)	100	FrequencySettings(GHz)	<input type="text" value="100"/> <input type="button" value="set"/>
Device Mode	TDCM10112111	Slot	1
Production date	2025/01/09	Serial number	005012224149
		Software version	1.01.02
		Hardware version	1.01.02

2.2.4 Change the Channel Spacing

To change the channel spacing for different systems, please click the 'set' button of the Frequency Settings:

Frequency Settings(GHz)

100 ▼

set

The system supports 100G and 50G, choose the required frequency and click 'Send' to set the new channel spacing.

Frequency Settings(GHz)

100 ^

send

1

005012224149

Software

1.01.02

005012224149

Hardware version

1.01.02

100 ^

100

50