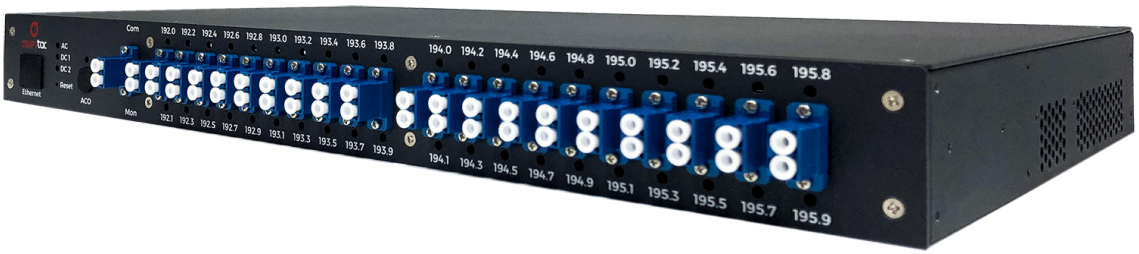
Ascentac

CWDM or C-band DWDM + Power Meter

Ascentac MFNS7100 & 7500



Maximizing Network Capacity with Low Cost and High Efficiency & Identifying Faults Section

Ascentac MFNS7100 & 7500 Series, CWDM / C-band DWDM with Power Meter, can combine multiple wavelengths from different fibers via optical multiplexer onto one single fiber for transmission. It is used for 5G wireless fronthaul optical data transport network solution.

Ascentac MFNS7100 & 7500 Series features low power consumption, low insertion loss and high isolation. It also has excellent wavelength stability. The initial wavelength and number of channels are specifiable.

Ascentac MFNS7100 & 7500 Series has its own Element Management System (EMS) which can be used to manage equipment. Users are allowed to set different thresholds. The system also has alarm function which users can identify whether faults occur in the end of BBU (Base Band Unit) or AAU (Active Antenna Unit) or in the middle of optical cables.

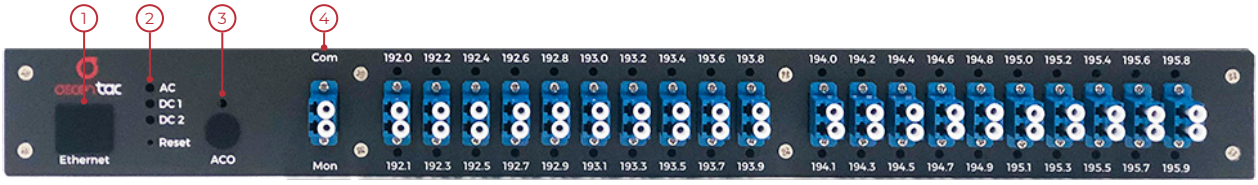
Benefits

- Up to 40 λ available, initial wavelength and number of channels specifiable
- Scanning fast and measuring value of optical power in dual-direction
- LC connector

Application

- Data center or FTTH
- Fiber monitoring
- CATV network
- 4G or 5G fronthaul

Description



① Ethernet RJ45 interface (10M / 100M / 1000M)

② LED power indicator (AC / DC1 / DC2)

③ LED alarm indicator (ACO=Alarm Cut Off)

④ Optical interface & LED indicator for the status of optical power

⑤ AC power supply: 100 to 240V (50/60Hz)

⑥ Power switch

⑦ Fuse

⑧ DC power supply: 36 to 72V

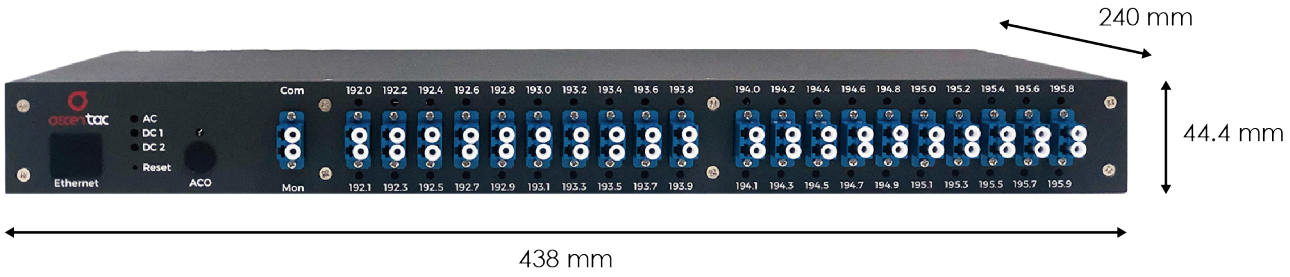
⑨ External alarm interface (Dry & wet contact) (-48VDC power output)

⑩ Fan

⑪ Ground point

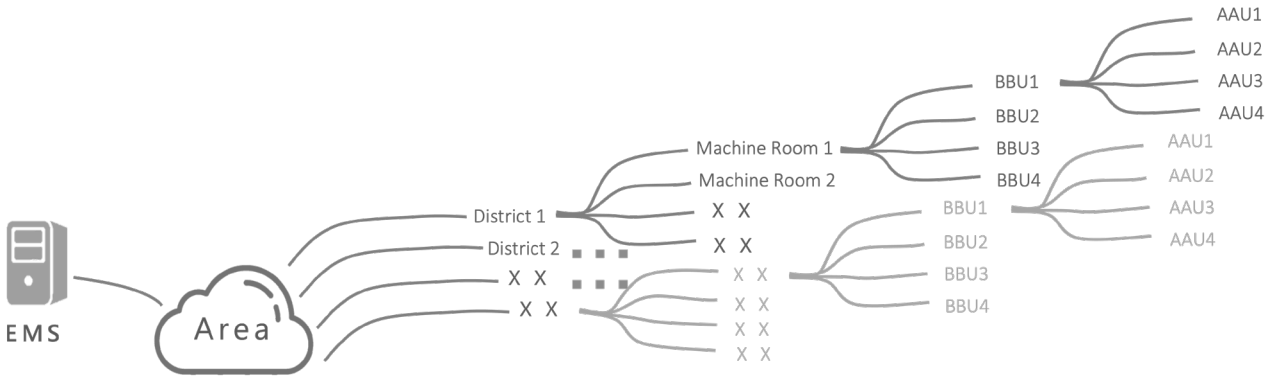
1U Managed Rackmount Design with High Flexibility

Ascentac MFNS7100 & 7500 Series can be mounted in a standard-sized, 19“ or 23”-wide rack.
Width x Height x Depth: 438 x 44.4 x 240 mm



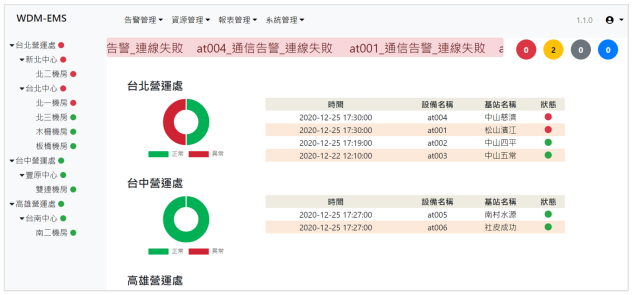
EMS Structure

The Element Management System (EMS) can contain the equipment of each district with the hierarchical design. Different classes and names can be defined by users. The monitoring data between the end of Base Band Unit (BBU) and the end of Active Antenna Unit (AAU) can be collected in this system.



EMS Interface

Dashboard



Detailed Information

CWDM / DWDM Setting

Several thresholds can be set. Alarm will be generated if the value is lower then the threshold.

CWDM / DWDM List

SFP：Small Form-factor Pluggable

Area Management

Levels and names can be defined by users as the tree structure on the left side of the interface.

Personnel Management

Performance Management

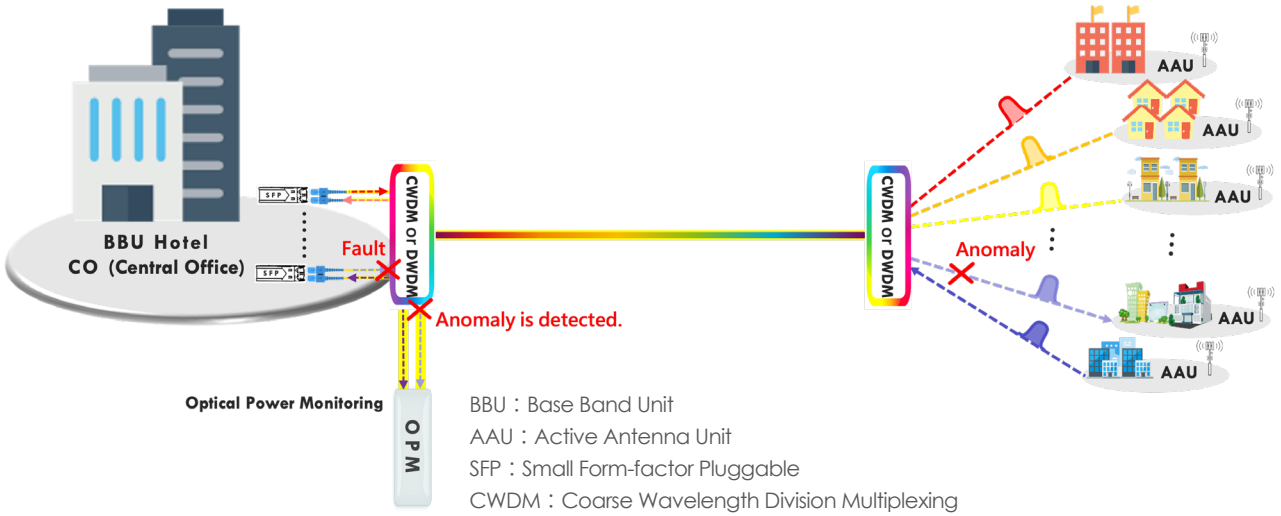
Monitor the performance status of the operation and be integrated with the customer's Network Management System (NMS) if required

Alert

EMS：Element Management System
NMS：Network Management System

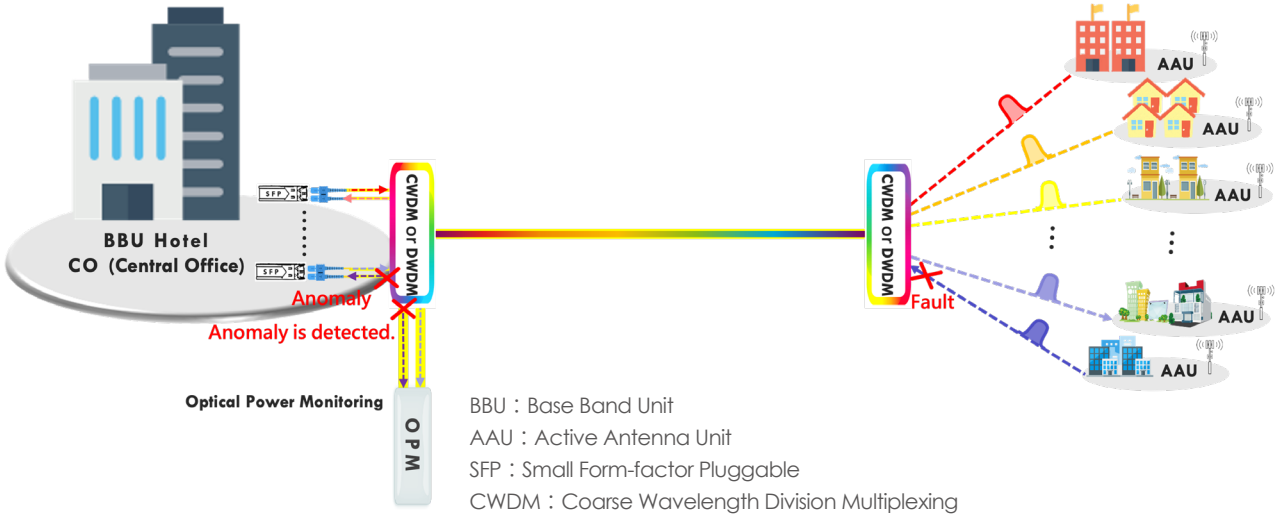
Application

1. The fault occurs at one end of the BBU.



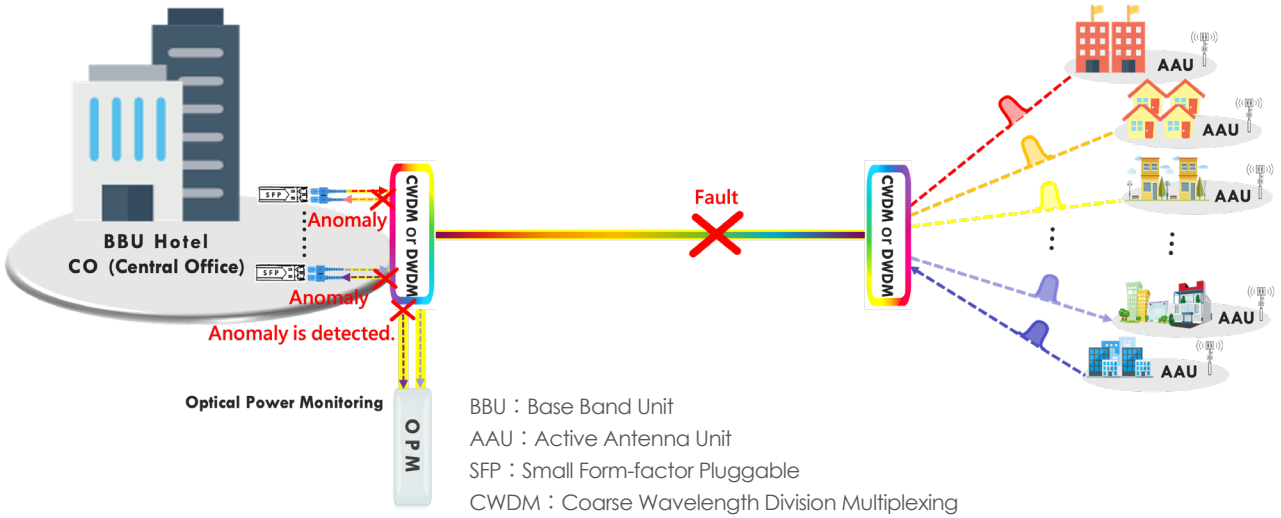
BBU：Base Band Unit
AAU：Active Antenna Unit
SFP：Small Form-factor Pluggable
CWDM：Coarse Wavelength Division Multiplexing
DWDM：Dense Wavelength Division Multiplexing

2. The fault occurs at one end of the AAU.



BBU：Base Band Unit
AAU：Active Antenna Unit
SFP：Small Form-factor Pluggable
CWDM：Coarse Wavelength Division Multiplexing
DWDM：Dense Wavelength Division Multiplexing

3. The fault occurs in the middle of the optical cable.



BBU：Base Band Unit
AAU：Active Antenna Unit
SFP：Small Form-factor Pluggable
CWDM：Coarse Wavelength Division Multiplexing
DWDM：Dense Wavelength Division Multiplexing

Specification

CWDM or C-band DWDM with Power Meter			
Model		MFNS7100 (CWDM)	MFNS7500 (C-band DWDM)
Wavelength Range		1271 to 1611 (nm)	192.0 – 195.9 (THz)
Maximum Channel		18	40
Channel Spacing		20 (nm)	100 (GHz)
Power Range (dBm)		+10 to -35	
Maximum Input Power (dBm)		+27	
Accuracy (dB)		± 0.5	±1.0
Insertion Loss (dB)	COM→Channel	3.7	4.4
	COM → Mon	18.6	18.6
	Channel→Mon	22.2	22.9
Channel Isolation (dB)	Adjacent	30	25
	Non-adjacent	45	30
Return Loss (dB)		40	
Measurement Time (s)		1	10 (Typical) (Full scan)
Resolution (dB)		0.01	
Optical Connector		LC/PC	
Working Temperature (°C)		0 to +50	
Storage Temperature (°C)		-10 to +70	
Relative Humidity (%)		5 to 85 ’ Non-condensing	
Size (H x W x D) (mm)		44.4 x 438 x 240	
Weight (kg)		< 4 (About 3.9)	

Ordering Information

CWDM

MFNS 07- X 71XX

Model
A : The value of optical power can be measured.

Channel
01: 2-CH, 2 wavelengths (1 pair of TX & RX)
02: 4-CH, 4 wavelengths (2 pairs of TXs & RXs)
03: 6-CH, 6 wavelengths (3 pairs of TXs & RXs)
04: 8-CH, 8 wavelengths (4 pairs of TXs & RXs)
05: 10-CH, 10 wavelengths (5 pairs of TXs & RXs)
06: 12-CH, 12 wavelengths (6 pairs of TXs & RXs)
07: 14-CH, 14 wavelengths (7 pairs of TXs & RXs)
08: 16-CH, 16 wavelengths (8 pairs of TXs & RXs)
09: 18-CH, 18 wavelengths (9 pairs of TXs & RXs)

* TX: Transmit; RX: Receive

Notes：1. Please specify wavelengths after choosing the number of channel. (Options for wavelengths: 1271nm, 1291nm, 1311nm, 1331nm, 1351nm, 1371nm, 1391nm, 1411nm, 1431nm, 1451nm, 1471nm, 1491nm, 1511nm, 1531nm, 1551nm, 1571nm, 1591nm & 1611nm)

Example：MFNS 07-A7101
Wavelength：1271nm、1291nm。

C band DWDM

MFNS 07- X 75XX

Model
A : The value of optical power can be measured.

Channel
01 : 12-CH, 12 wavelengths (6 pairs of TXs & RXs)
02 : 16-CH, 16 wavelengths (8 pairs of TXs & RXs)
03 : 20-CH, 20 wavelengths (10 pairs of TXs & RXs)
04 : 24-CH, 24 wavelengths (12 pairs of TXs & RXs)
05 : 28-CH, 28 wavelengths (14 pairs of TXs & RXs)
06 : 32-CH, 32 wavelengths (16 pairs of TXs & RXs)
07 : 36-CH, 36 wavelengths (18 pairs of TXs & RXs)
08 : 40-CH, 40 wavelengths (20 pairs of TXs & RXs)

* TX: Transmit; RX: Receive

Note：1. Please specify wavelengths after choosing the number of channel. (Options for wavelengths: 192.0THz, 192.1THz, 192.2THz, 192.3THz, 192.4THz, and so forth. Only until 195.9THz)

Example：MFNS 07-A7501
Wavelength： 192.0THz、192.1THz、193.2THz、193.3THz、193.6THz、193.7THz、194.4THz、194.5THz、194.6THz、194.7THz、195.8THz、195.9THz。

ascentac
Take your network best.

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