

Idle Fiber Resource Management System: Intelligent Optimization, Efficient Management, Unleashing the Potential of Optical Fibers

IFMS-24-1U/IFMS-48-1U



In today's digital era, optical fiber networks have become the backbone of information transmission. However, with the continuous expansion of the network scale and the increasing complexity of business requirements, the efficient management of optical fiber resources has become a crucial challenge. There are a large number of underutilized optical fiber resources in many networks. These "idle optical fibers" not only lead to resource waste but also increase the operation and maintenance costs. To address this issue, Fiberwdm has launched the Idle Fiber Resource Management System (IFRMS), which aims to help you manage optical fiber resources efficiently, optimize network performance, and reduce operating costs.

The Idle Fiber Resource Management System (IFRMS) is an intelligent management platform specifically designed for optical fiber networks. Through advanced optical fiber detection technology, intelligent analysis algorithms, and automated management tools, it helps you comprehensively monitor the status of the optical fiber network, quickly identify idle optical fiber resources, and provide optimization and scheduling suggestions. This system can not only significantly improve the utilization rate of optical fiber resources but also enhance the reliability and flexibility of the network, bringing unprecedented convenience and efficiency to your communication network management.

Product Features

- ◆ The 1U chassis can access 48 cores and support 24 dual-core services.
- ◆ Services and detections can be accessed simultaneously without affecting each other.
- ◆ The normal communication of services will not be affected even when the device is powered off (or malfunctions).
- ◆ Real-time Monitoring and Status Analysis
 - Optical Fiber Status Monitoring: Monitor the line loss status of the optical fiber link in real time.
 - Fault Early Warning: Automatically identify potential problems in the optical fiber link and issue alarms in a timely manner to help maintenance personnel respond quickly.

Intelligent Resource Management System

- ◆ Support for Permission Management: Set functions and divide regions for users with different permissions.
- ◆ Support for managing the in-use, idle, and current status of optical cable cores, and it can display the loss situation of the cores.
- ◆ Support for the unified management function of resources such as the site information and identification of the optical cable network.
- ◆ Support for the alarm positioning function. It supports secondary alarms and allows setting the loss warning threshold and alarm threshold.
- ◆ Support for the historical curve graph of optical cable loss; support for tracking and

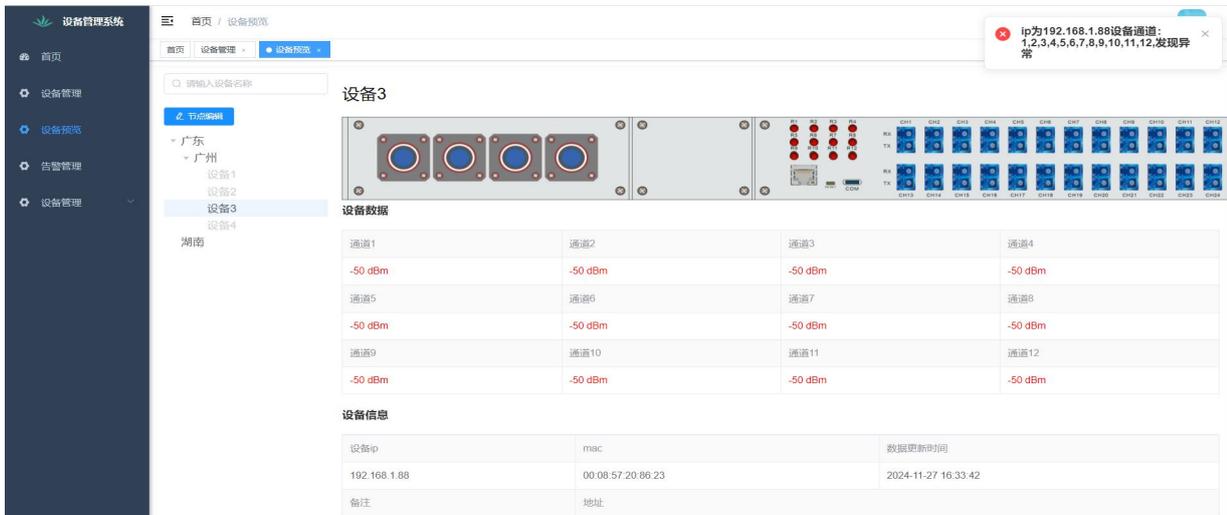
recording the optical routing curves of different times and different optical cable segments.

- ◆ Support for the unified management function of fault alarm information, including functions such as alarm type management, alarm query, and alarm cause.
- ◆ Support for remote management. Manage the optical fiber network anytime and anywhere through the Web interface or mobile application to improve the operation and maintenance efficiency.

Specification Parameters:

Parameters	Unit	Specification
Size of device	mm	44×300×144
Max power dissipation	W	5
Channel number	CH	Max support 48 core (24 send 24 receive)
Optical power detection wavelength	nm	SM-1610
Service access working wavelength	nm	SM-1310/1550
Insertion loss	dB	≤1.0
Optical power detection range	dBm	-40 ~ +1
Optical power detection accuracy		± 5%
Resolution	dB	0.01
Output power	dBm	-5 ~ 0
Short-term output stability		±0.05dB /15min
Long-term output stability		±0.1dB / 8h(20°C)
Optical output mode		Continuous output
Fiber type		SM (9/125um
Interface type		LC/PC, MPO/PC
Working temperature	°C	-5 ~ + 55
Storage Temperature	°C	-20 ~ + 70
Relative humidity		5% ~ 95% Noncondensing

Network Management Interface



Build a unified platform for the management of idle optical fiber resources

Ordering information

Equipment Model	Specification
IFMS-24-1U-A	24-core (12 cores for transmitting and 12 cores for receiving) Idle Fiber Detection System (Unified Platform Software V1.0 for Idle Optical Fiber Resources Management), without service access. The single-mode detection range is 120KM. Connector type: LC/UPC. Power supply: single power supply, either 220V AC power supply or 48V DC power supply. 1U chassis.
IFMS-24-1U-B	24-core (12 cores for transmitting and 12 cores for receiving) Idle Fiber Detection System (Unified Platform Software V1.0 for Idle Fiber Resources Management). It can simultaneously access 24 channels of services. The operating wavelength is 1310/1550nm. The single-mode detection range is 120 kilometers. Connector type: LC/UPC. Single power supply, either 220V AC power supply or 48V DC power supply. 1U chassis.
IFMS-48-1U-A	48-core (24 cores for transmitting and 24 cores for receiving) Idle Fiber Detection System (Unified Platform Software V1.0 for Idle Fiber Resources Management), without service access. The single-mode detection range is 120KM. Connector type: LC/UPC. Single power supply, either 220V AC power supply or 48V DC power supply. 1U chassis.
IFMS-48-1U-B	48-core (24 transmitting cores and 24 receiving cores) Idle Fiber Detection System (Unified Platform Software V1.0 for Idle Fiber Resources Management). It can simultaneously access 24 channels of services with an operating wavelength of 1310/1550 nm. The single - mode detection range is 120 km. It uses LC/UPC connectors. It has a single power supply, which can be either a 220V AC power supply or a 48V DC power supply. It comes in a 1U chassis.