PREVAIL

8. Optical Switch Module WOS-WS-1524J-4K

1. Product Overview

This product is designed for fiber routing and backup switching; automatic and manual switching is optional.

When automatic switching is selected, after the switching condition is set, it will automatically switch to the spare path if the signal in the main path fails, thereby improving the transmission security of the network. It supports a wide range of the wavelength from 1200nm to1600nm.

2. Performance Characteristics

- ➢ Support hot swap.
- ➢ The switching mode is manual and automatic.
- ➢ Long life expectation: > 10 million times.
- ➢ Two independent optical input power detection.
- ➢ Wide wavelength range, 1200nm-1600nm
- ➢ Internal temperature detection and monitoring functions.

3. Block Diagram
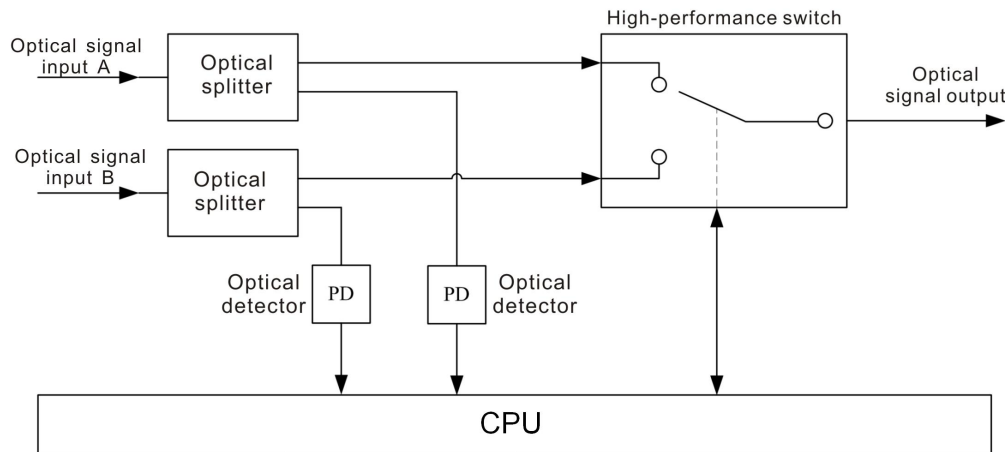
4. Technique Parameters

| Item	Unit	Parameter	Note
Operating wavelength	nm	1200 – 1600	
Insertion loss	dB	≤1.3	Test at 1310nm and 1550nm
Switching time	ms	≤ 500	
Return loss	dB	≥ 55	
Max input optical power	mW	500	
Switching times		≥ 10,000,000	
Optical connector		FC/APC or SC/APC	
Maximum power consumption	W	≤ 2	
Operating temperature	℃	-5 - +55	
Storage temperature	℃	-30 - +70	
Weight	Kg	1	

5. Operation instructions of the display menu

Once the module is installed, the corresponding slot in the display menu will highlight the module which is online. After entering the submenu, the following parameters can be seen:

AInPower	x.xdBm	Optical receiving power of A channel, main channel.
BInPower	x,xdBm	Optical receiving power of B channel, auxiliary channel.
SWCtrlMode	Manual	Current switching mode: "Auto"—automatic mode, "Manual"—manual mode.
WorkChan	A	The current working channel: A—the current working channel is A channel, B—the current working channel is B channel.
SwitchPower	x.xdBm	The switching threshold under automatic switching mode, settable value: -15-+24dBm, 0.1dB stepping
Wavelength	1550nm	Working wavelength, 1310nm, 1550nm optional.
DevTemp	xx.x℃	Module temperature
SN	xxxxxx	Serial number
Version	x.xx	Software version number
WorkTime	x.xHour	Total operating hours of the equipment

Note: When the main channel optical power is greater than the threshold, the main channel is selected. When the main channel optical power is less than the threshold, the auxiliary channel is selected.

6. Structure Description
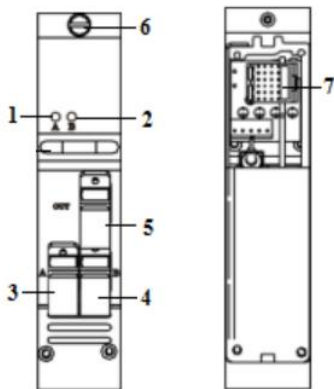
Front Panel   Rear Panel

No.	Component Description	Note
1	A channel operating indicator	Green: -15～+24dBm
2	B channel operating indicator	Red: ＜-15dBm or＞+24dBm
3	A channel optical signal input	
4	B channel optical signal input	
5	Optical signal output	
6	Module fixing screw	Used to fix the module
7	Module socket	Used to connect module and rack

7. Installation

➢ This module can be installed in slots 1-16 and can be fully configured.

➢ Check whether the pins on the rear of the module are bent.

➢ Install the module in place along the guide and tighten the screws.

➢ Avoid direct observation and contact with the fiber tip. You must confirm the equipment is off when cleaning the port.

LASER RADIATION

8. Naming Specification

WOS-WS-1524J-S-4K

4K：matched with WOS-4000 optical communication platform
Fiber connector type
S: SC/APC；F: FC/APC
Optical switch（module）