

OLP Optical Line Protection

Optical Line Protection (OLP) system is a new optical line protection subsystem developed with advanced technology of dynamic and synchronous optical switches. When communication quality is lower or equipment breaks down due to accidental fracture or bigger loss of optical fiber in the optical transmission line, the OLP system can switch the primary line to the secondary line within a short time, to ensure normal operation communication of line, which effectively prevent fiber or equipment fault and shorten the recovery time from hours to milliseconds.



Function

- Optical line automatic switching protection
- Real-time power monitoring
- Support automatic switching of primary and secondary routes

Highlight

- Support automatic switching of primary and secondary routes
- Support manual and automatic switching modes
- Low switching time <30ms
- Low insertion loss: <5.5dB
- Support automatic return to the Primary
- Support manual, automatic working mode settings
- Support for switching threshold settings

Optical Line Protection switch provides both Manual and Automatic switching mode. In Manual mode, the system switches optical path only based on the commands from user.

In the Automatic mode, the system switches based on the power level detected and the preset threshold. Under automatic mode, the system can be set to be revertive or Non-revertive modes.

Under Revertive mode, the system switches back to the working path automatically after the fault condition is cleared. Under Non-revertive mode, the system does not switch back. The OLP models fit HT6000 Series CH04, CH08, CH20 Chassis.



Performance Parameter

Parameter		1:1	1+1	Unit
Operating Wavelength		1310±50nm, 1550±50nm		nm
Optical Power Range		+ 23 ~ -50		dBm
Accuracy of Optical Power		±0.25		dB
Detection Light Power Resolution		±0.01		dB
Return Loss		≥55		dB
Polarization Dependent Loss		≤0.05		dB
Wavelength Dependent Loss		≤0.1		dB
Insertion Loss		Tx≤1.2dB RX≤1.2dB	Tx≤4dB RX≤1.2dB	dB
Switch Speed		<30	<15	ms
Dimension		191 (W) x 253 (D) x 20 (H)		mm
Operating Temperature-10℃ ~ +60℃		-10℃ ~ +60℃		°C
Environment	Storage Temperature	-40°C ~ +85°C		°C
	Relative Humidity	5%~95% Non-condensing		
Power Consumption		≤5		W

Ordering Information

Model	Function	Switching Time	Insertion Loss
HT6000-OLP1+1	1+1 Optical Line Protection, T1 and T2 are sent at the same time, select R1 or R2 to receive.	≤15ms	Tx≤4dB RX≤1.2dB
HT6000-OLP1 : 1	1:1 Optical Line Protection, T1 Send and R1 Receive or T2 Send and R2 Receive.	≤30ms	Tx≤1.2dB RX≤1.2dB

HT6000 Series Chassis



Dual power supply AC/DC optional

• Multiple service card hybrid insertion

• Support 10G/100G /200G hybrid

CH04 Chassis

transmission

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• Standard 1U, 19", 4 slots



CH08 Chassis

- Standard 2U, 19", 8 slots
- Dual power supply AC/DC optional
- Multiple service card hybrid insertion
- Support 10G/100G /200G hybrid transmission



CH20 Chassis

- Standard 5U, 19", 20 slots
- Dual power supply AC/DC optional
- Multiple service card hybrid insertion
- Support 10G/100G /200G hybrid transmission



HT6000 Series Chassis is the foundation for deploying and managing the HTF multi-service mixed-media solutions.

HT6000 Series Chassis Optional						
CH04 Chassis: 482.5(W) x 350(D) x 44.5(H) mm	1U 19-inch chassis	1 network management slot	3 universal service slots			
CH08 Chassis: 482.5(W) x 350(D) x 89(H) mm	2U 19-inch chassis	1 network management slot	7 universal service slots			
CH20 Chassis: 482.5(W) x 350(D) x 222.5(H) mm	5U 19-inch chassis	1 network management slot	19 universal service slots			
Power Consumption: 1U <120W, 2U<200W, 5U<400W						
Support SNMP, Web, CLI multiple network management modes						
Support dual power supply redundancy protection, Power supply support AC: 220V / DC: -48V optional						

HT6000 Series Chassis support multiple service intermixing:

100G Transponder	100G OEO	4/8/16/40/48 Channel DWDM MUX/DEMUX,or OADM Card
2x100G to 200G Muxponder	25G OEO	4/8/16 Channel CWDM MUX/DEMUX
4x25G to 100G Muxponder	2x10G OCP Transponder	OLP Optical Line Protection
4x10G SFP+ Transponder	8x1.25G Convergence 10G Muxponder	EDFA Card