OLP Optical Line Protection

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Variants

All

Details

Product Overview for 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 larger 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 shortens the recovery time from hours to milliseconds.

Function of OLP:

Optical line automatic switching protection

Real-time power monitoring

Support automatic switching of primary and secondary routes

Highlights of OLP:

Support automatic switching of primary and secondary routes

Support manual and automatic switching modes

Low switching time: 30ms

Low insertion loss: 5.5 dB

Support automatic return to the Primary

Support manual and automatic working mode settings

Support for switching threshold settings

The optical line protection switch provides both manual and automatic switching modes. In manual mode, the system switches the optical path only based on the commands from the user.

In automatic mode, the system switches based on the detected power level and the preset threshold. Under automatic mode, the system can be set to 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.

Perfomance Parameter of OLP:

Category	Parameter	Value	Unit
Wavelength	Operating Wavelength	1310 ± 50, 1550 ± 50	nm
Optical Power	Optical Power Range	+23 ~ -50	dBm
Optical Power	Accuracy of Optical Power	±0.25	dB
	Detection Light Power Resolution	±0.01	dB
Losses	Return Loss	>=55	dB
Losses	Polarization Dependent Loss	=0.05	dB
	Wavelength Dependent Loss	=0.1	dB
	Insertion Loss (Tx)	=1.2 / =4	dB
Insertion Loss (Rx)	=1.2	dB	
Switching	Switch Speed	30 / 15	ms
	Physical Dimensions	Width Depth Height	483 250 44	mm
Environmental	Operating Temperature		-10 ~ +60	?
	Storage Temperature		-40 ~ +85	?
	Relative Humidity	5% ~ 95% Non-condensing	%
Power	Power Consumption	?5	W