



#### Applications

- Provides redundant communication over two optical lines based on optical power measurement.

#### Features

- Line protection is supported for both dual fiber and single fiber lines.
- Panel buttons selectable Automatic/ Manual modes.
- Real-time monitoring of the main and backup optical power links.
- Fast response time, with a switching time of less than 20 ms.
- It includes automatic non-return and automatic return functions, with adjustable return time for different application scenarios.
- On-site operation without a management card is possible.
- Path switch state is preserved during power failure, ensuring uninterrupted operation.
- Replacement of the network management card does not affect the operation of OLP card.
- Multiple network management options are available, such as SNMP and Web GUI.
- The system supports both AC power (220V) and DC power (-48V), with 1+1 power input protection.
- Standard half height X8600 series module size. Up to 3 OLP modules + management card can be installed in 1U chassis.

## Description

The OLP (Optical Line Protection) subsystem is based on advanced optical switch technology. This independent monitoring and protection system operates solely on the physical link of the optical cable, separate from the communication transmission system. When it detects a reduction or interruption in optical signal power in the working path, the system automatically switches the signal to the redundant optical fiber path. State of optical path is preserved during the power failure. This ensures the establishment of a highly reliable, secure, flexible, and disaster-resistant optical communication network. Two versions are available: OLPA is intended to protect fiber pair and OLPA-BiDi protects single fiber systems by measuring directional optical signal power.

## Product Specifications

Parameter		Description	
Working wavelength range		1260 nm ~ 1650 nm	
OLP type		OLPA (dual fiber 1+1 protection)	OLPA-BiDi (single fiber 1+1 protection)
Switching time		<20 ms	<20 ms
Introduction loss	Main path	<5 dB	<5.5 dB
	Backup path	<5 dB	<5.5 dB
Monitoring power range		-50 dBm ~+25 dBm	
Working temperature range		-10°C~60°C	
Working humidity range		5%~95% no condensation	
Storage temperature		-40°C~85°C	
Equipment dimension		1U: 44 mm (H)×442 mm (W)×280 mm (D)	
Network management		Multiple network management options are available, such as SNMP and Web	
Optical interface		LC/UPC	
Power supply		AC: 90 ~ 260 V or DC: -36 ~ -72 V (1+1 power input backup support)	
Typical power consumption		Full configuration (including chassis and management module) < 30 W	
Heat dissipation		Fan cooling	
MTBF		>100000 hours	

## Ordering information<sup>1</sup>

Part number	Product Description
X86-OLPA	OLPA (dual fiber 1+1 protection)
X86-OLPA-BiDi	OLPA-BiDi (single fiber 1+1 protection)

### Notes

<sup>1</sup> For accurate order specification please contact XenOpt reseller before placing an order. The content of this document is subject to change without notice. XenOpt does not guarantee errorless or outdated information.

Please specify any compatibility requirements at time of ordering. Standard MSA compatible pluggable components may not work or some function of these components may not be available in devices that require customized compatible devices. Pluggable components compatible with one type of communications equipment may not work in other type of communications equipment.

### Important Notice

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