

# Optical Line Protection Switch (OLP)

Plug-in Card Type

OTN Solutions for Metro, Regional & Long Haul



## Description

Optical Line Protection Switch (OLP) is a product that is used in the protection of network transmission line. By real-time monitoring the power status in working fiber, it can automatically switch from working fiber to backup fiber when the power value of working fiber is lower than a user defined threshold, achieving line protection of optical transmission system.

OLP(Optical Line Protection) is a device that is used in the protection of network transmission line, it can realize optical power monitoring and automatic switching. In optical communication network, OLP monitors optical power of optical fiber and standby optical fiber at real time. In case the current optical power of optical fiber is less than pre-set switching threshold value, then alarm is on and it would

switch to standby optical fiber automatically to protect optical transmission system line.

## Features

- Independent of data rate, format and wavelength
- Highly configurable to fit network applications
- Real-time monitoring of standby optical power
- Transparent transmission characteristic
- Reduce the loss caused by line fault
- Increase the reliability of the transmission network, improve network quality
- High level of integration by plug-in design, to save the space of cabinet
- Remote configuration through SNMP management

Product Specifications

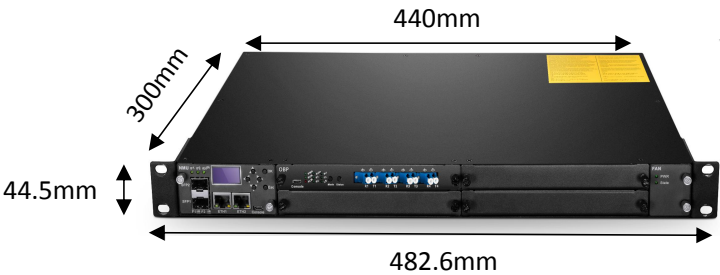
|                                |                                                    |                               |                           |
|--------------------------------|----------------------------------------------------|-------------------------------|---------------------------|
| Operating Wavelengths          | 1310±50nm/1550±50nm                                | Monitoring Power Range (dBm)  | +23~-50                   |
| Monitoring Power Accuracy (dB) | ±0.25                                              | Optical Power Resolution (dB) | 0.01                      |
| Isolation (dB)                 | ≥45                                                | Crosstalk (dB)                | ≥55                       |
| PDL                            | ≤0.05dB                                            | WDL                           | ≤0.1dB                    |
| Operating Life (cycle)         | >10000000                                          | Optical Power (mW)            | ≤300                      |
| Insertion loss (dB)            | Tx < 3.8, Rx < 1.2(1+1)<br>Tx < 1.5, Rx < 1.2(1:1) | Switching Speed (ms)          | <15(1+1)<br><35(1:1)      |
| Storage Temperature            | -40 to 80°C (-40 to 176°F)                         | Operation Temperature         | -10 to 50°C (14 to 122°F) |
| Consumption (W)                | <3                                                 | Connector                     | LC/UPC                    |

Dimensions

4-slot 1U managed chassis, supports up to 4x multiplexer/EDFA/OEO/OLP card with accessories;

- Width: 482.6mm (19")
- Height: 44.50mm (1.75")
- Depth: 300mm (11.81")

OLP plug-in card occupies one slot.



Ordering Information

| Protected Mode                                     | Connector        | Fiber Type                 | Housing                                | Power 1                  | Power 2                  |
|----------------------------------------------------|------------------|----------------------------|----------------------------------------|--------------------------|--------------------------|
| <a href="#">OLP 1+1</a><br><a href="#">OLP 1:1</a> | LC/UPC<br>SC/UPC | SMF<br>1310±50nm/1550±50nm | Plug-in Card Type<br>1U 19" Rack Mount | 100V-240VAC<br>36V-72VDC | 100V-240VAC<br>36V-72VDC |