# Optical Line Protection (OLP) FW6OLP

The OLP optical protection board is a protection system developed by FIBERWDM for fiber optic line backup. It adopts advanced optical automatic switching modules and is an optical device used for primary and backup optical path switching in the field of fiber optic communication. It can automatically identify the signal status of the primary and backup system optical paths and perform instantaneous switching of the optical path to ensure the normal operation of the primary optical cable in the event of a complete obstruction, thereby improving the service quality of the service provider. The OLP optical line protection board is widely used in primary and backup protection of various trunk lines and in networks requiring various optical path switching. Its advantages lie in the direct utilization of optical signals in the optical line, compact size, and cost-effectiveness, making it widely used in various optical transmission fields.

## Product Introduction




Figure 1: OLP Optical Protection Board

## Product Features

- Supports optical line protection for both single-mode and multimode fiber

- Supports dual-fiber bidirectional and single-fiber bidirectional protection modes.
- Supports 1+1 (dual-transmitter dual-receiver) and 1:1 (transmitter selection receiver selection) protection modes.
- Wide optical power monitoring range: -50dBm to +25dBm.
- Short optical path protection switching time: <20ms.
- Supports local and remote control.
- Supports SNMP-based unified network management platform.Include CLI (telnet and console), Web, and NetView (graphical interface).

## Product Specifications

| Parameters | | | Specifications |
|---|---|---|---|
| Wavelength range | | | Tx1310±50nm and 1550±50nm |
| Detection of the optical power range | Tx | | +25dBm~-50dBm |
| | Rx | | +10dBm~-50dBm |
| Insertion loss | 1+1 Protection | Transmitter End | ≤4.0dB |
| | | Receiver End | ≤1.5dB |
| | 1:1 Protection | | ≤1.5dB |
| Optical power measurement accuracy | | | ≤0.5dB（+20dBm~-50dBm）<br>≤1.0dB（-40dBm~-50dBm） |
| Optical power resolution | | | ≤0.01dB |
| Wavelength-dependent losses | | | ≤0.25dB |
| Polarization-dependent losses | | | ≤0.1dB |
| Switching Time | | | ≤20dB |
| Return Loss | | | ≤45dB |
| Crosstalk | | | ≤55dB |

| | | |
|---|---|---|
| Network Management | | NetView, Web |
| Board Dimensions | | 156 (W) ×20 (H) ×225 (D) (mm) |
| Environment Requirement | Operating Temperature | -10℃~50℃ |
| | Storage Temperature | -40℃~80℃ |
| | Relative Humidity | 5%~95% (non-condensing) |
| Safety and EMC Compliance | | FCC, UL, CE, TUV, CSA standards |
| Power Consumption | | <5W |

## Order Information

| Part No. | Specifications |
|---|---|
| FW6OLPA | OLP Card， Optical line 1+1 protection LC/UPC,dual fiber used in used in FW6600 series take one slot |
| FW6OLPB | OLP Card， Optical line 1:1 protection LC/UPC,dual fiber used in used in FW6600 series take one slot |
| FW6OLPABD | OLP Card， Optical line 1+1 protection LC/UPC，Bi-direction used in used in FW6600 series take one slot |