

OLP (Optical Protection Card)

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Details

Optical Line Protection (OLP) Card – 1+1 Protection Module

The Optical Protection Card (OLP) from D-TECH Trading is designed to provide reliable optical layer protection for WDM systems. It supports 1+1 protection by continuously monitoring the main and standby optical paths and automatically switching in case of signal failure or degradation, ensuring uninterrupted communication.

Applications

- Optical Line 1+1 Protection (OLP)
- Optical Multiplex Section Protection (OMSP)
- Optical Channel Protection (OCHP)

Technical Specifications

Parameter	Specification
Function	Supports 1+1 optical protection, dual transmission, selective receiving, single terminal switching
Slot Number	1 Slot
Integration	Supports 1 or 2 groups of protection modules (configurable)
Working Wavelength	1528 nm ~ 1568 nm

Insertion Loss	TX ? 4 dB, RX ? 1.5 dB
Switching Time	< 5 ms (optical switching)
Input Optical Power	-25 dBm ~ +21 dBm
Power Detection Accuracy	±0.5 dBm (@ ? -25 dBm)
Polarization Dependent Loss	? 0.1 dB
Isolation	> 50 dB
Return Loss	> 45 dB
Switching Life	> 10? operations
Switching Condition	Based on relative power difference and absolute power value
Switching Method	Locking, Forced, Manual, and Automatic switching modes
Reliability	Power-down latch, hot-swappable, independent of main control card failure