

HL1000 Series 2U+1U Rackmount CWDM Transmission System



Features

- Large capacity. Transmission rate per channel up to 10Gbit/s. Total capacity up to 160Gbit/s.
- SFP, SFP+ or XFP speed ratio: 155M, 1.25G, 2.5G, 4G, 10G.
- Flexible and transparent access for various rates and services including Ethernet, PDH, SDH, and CATV and etc.
- Expands capacity easily by inserting new CWDM OUT module cards. Support up to 16 channels per 2U rackmount.
- Long distance transportation from 10KM to 120KM.
- Wavelength reshaping and signal amplifying. (1R or 3R optional)
- Up to 18 channel for passive CWDM and DWDM upgrading is supported.
- OUT interfaces support various equipments connections, including single mode signal, multi mode signal or RJ45 access.
- Transmission mode support: single fiber, Bidi and dual fiber, Bidi transmission.
- Flexible network management configuration based on SNMP. CLI, WEB and TELNET optional.
- 1+1 power supply backup system. Hot plugging for duplicate power supply is supported. DC or AC optional.

Applications

- Line Monitoring
- WDM Network
- Telecommunication
- Cellular Application
- Fiber Optical amplifier
- Access Network

Passive Part: 1U 19" Passive CWDM Mux/Demux Rackmount



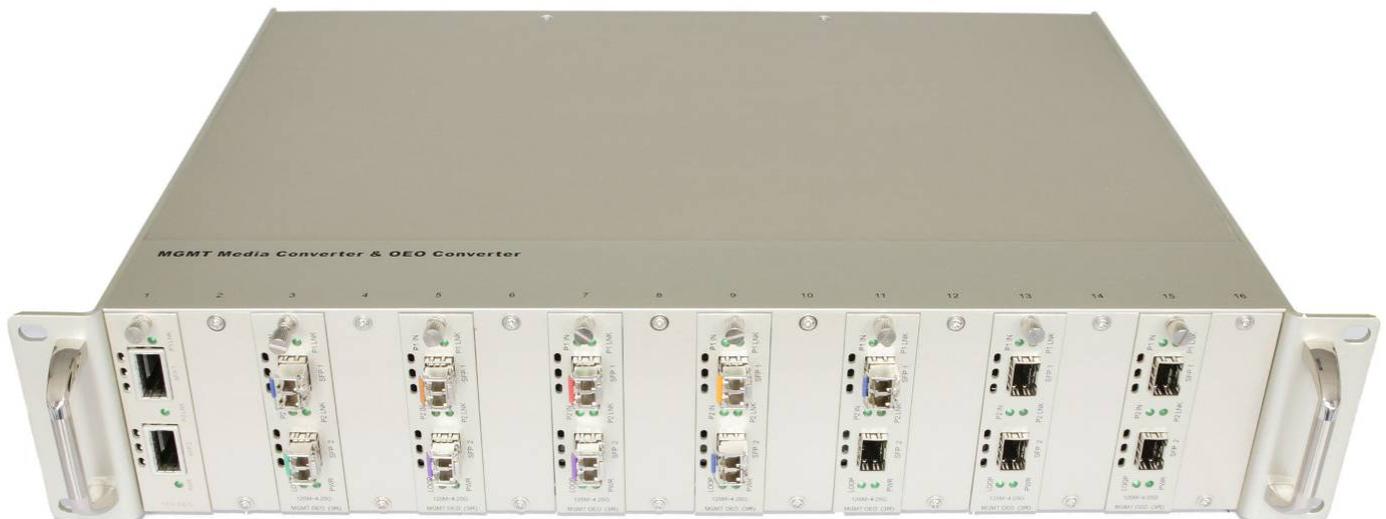
Performance Specifications For Passive CWDM Mux/Demux

| Parameter | 4 Channel | | 8 Channel | | 16 Channel | | |
|---|---------------------------|-------|-----------|-------|------------|-------|-----|
| | Mux | Demux | Mux | Demux | Mux | Demux | |
| Channel Wavelength (nm) | 1270~1610 | | | | | | |
| Center wavelength Accuracy (nm) | ±0.5 | | | | | | |
| Channel Spacing (nm) | 20 | | | | | | |
| Channel Passband (@-0.5dB bandwidth (nm) | >13 | | | | | | |
| Insertion Loss (dB) | ≤1.6 | | ≤2.5 | | ≤4.5 | | |
| Channel Uniformity (dB) | ≤0.6 | | ≤1.0 | | ≤1.5 | | |
| Channel Ripple (dB) | 0.3 | | | | | | |
| Isolation (dB) | Adjacent | N/A | >30 | N/A | >30 | N/A | >30 |
| | Non-adjacent | N/A | >40 | N/A | >40 | N/A | >40 |
| Inertion Loss Temperature Sensitivity (dB/°C) | <0.005 | | | | | | |
| Wavelength Temperature Shifting (nm/°C) | <0.002 | | | | | | |
| Polarization Dependent Loss (dB) | <0.1 | | | | | | |
| Polarization Mode Dispersion | <0.1 | | | | | | |
| Directivity (dB) | >50 | | | | | | |
| Return Loss (dB) | >45 | | | | | | |
| Maximum Power Handling (mW) | 300 | | | | | | |
| Operating Temperature (°C) | -5~+75 | | | | | | |
| Storage Temperature (°C) | -40~85 | | | | | | |
| Package dimension (mm) | 440(W)× 44(H)× 230(D)(mm) | | | | | | |

Specification may change without notice.

Above specification are for device without connector.

Active Part: OUT Board With SFP Transceivers In 2U 19" Rackmount





Single OTU Board With CWDM SFP

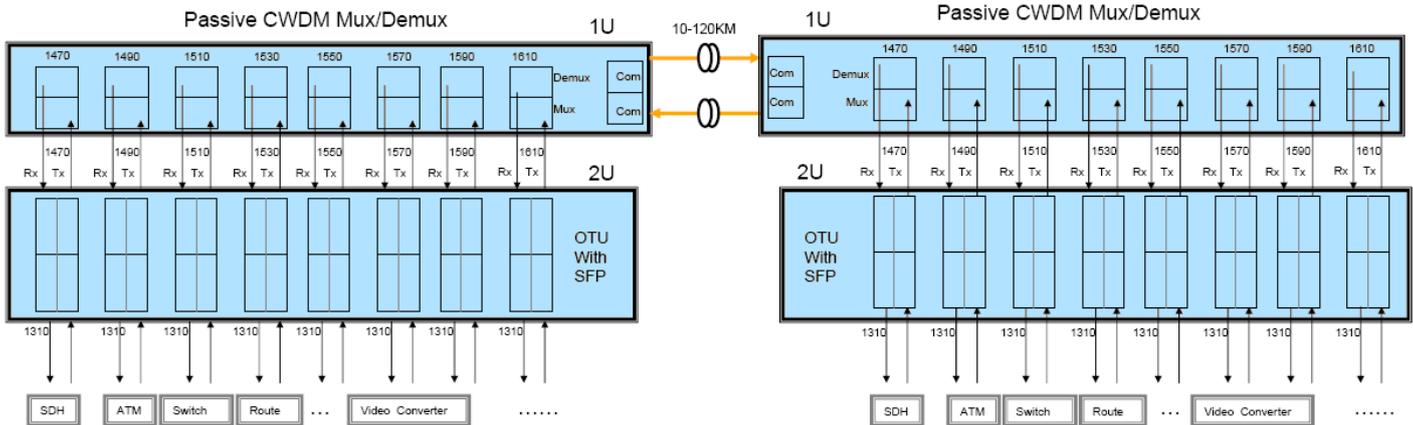
- One 2U OUT Rackmount supports up to 16pcs OUT boards. (Depends on number of CWDM wavelenths)
- Hot Plug supported.
- Convert all accessed signal wavelenths into standard CWDM wavelenths.
- Wavelength reshaping and signal amplifying.(1R or 3R optional)
- Compatible with standard CWDM SFP, SFP+ or XFP
- Support speed ratio: 155M, 1.25G, 2.5G, 4G, 10G



Performance Specifications For 2U+1U CWDM System

| System Parameters | | Technical Index |
|-------------------------------------|-----------------------|---|
| Maximum system capacity | | 4channel/8 channel/16channe/18 channel x10G |
| Wavelength range | | Comply with the ITU-G.695 standard |
| Service Access Types | | PDH , ATM, SDH (STM-1~STM-64) OC-192/ OC-48/ OC-12OC-32 FE, GE, 10GE, FICON/ESCON/FIBER Channel/CATV |
| Opticalinterface transmission | | 1R/3R transmission, each channel rate supports 125Mbps~10Gbps(Optional) |
| Physical network topology | | Point to point, Point to multi-points, Chain, Ring, Single Fiber Bidirectional |
| Fiber Type | | G.652 G.653 G.655 |
| Management System | | CLI /TELNET/SNMP/WEB |
| Product Size | 2U OTU | 25(W)×88(H)×116(D) (mm) |
| | 1U Rackmount | 440(W)×44(H)×230(D) (mm) |
| | 2U Rackmount | 428(W)×88(H)×322(D) (mm) |
| Environmental Requirement | Operating Temperature | -10℃ ~ 60℃ |
| | Storage Temperature | -40℃ ~ 80℃ |
| | Relative humidity | 5% ~ 95% |
| Power Supply Requirements(Standard) | | 220 V/AC, 50Hz, -48 V/DC(Optional) |
| Safety and EMC | | In line with the FCC, UL, CE, TUV, CSA standards |
| Power Consumption | | ≤ 60W |

Application



Ordering Information

| HL 1000C | X | XX | X | X | X |
|--------------|-------------|--|---|--------------------------------------|------------------------|
| Passive Part | System Type | Number of Channel | Transmission Type | management System | Power Supply |
| | 2 = 2U+1U | 04= 4 channel 08= 8 channel 16=16channel XX=Customize | 1=Dual fiber Bidirectional 2=Single fiber Bidirectional X=Customize | 1=With Management 2=No Management | 1=dual AC 2=dual DC |

| HL_OTU | X | X | X | XX | CXX |
|-------------|--|--|--|--|---|
| Active Part | Speed Ratio | Transmission Distance | Client Interface | Wavelength Reshaping | First Wavelength |
| | 0 = 155M 1 = 1.25G 2 = 2.5G 3 = 10G | 1 = 40KM 2 = 60KM 3 = 80KM 5 = 120KM X = Customize | S=Single-mode LC M=Multi-mode LC X = Customize | 1R= Without Wavelength Reshaping (Standard) 3R= With Wavelength Reshaping | 27 = 1270nm (1270~1610) XX=Customize |