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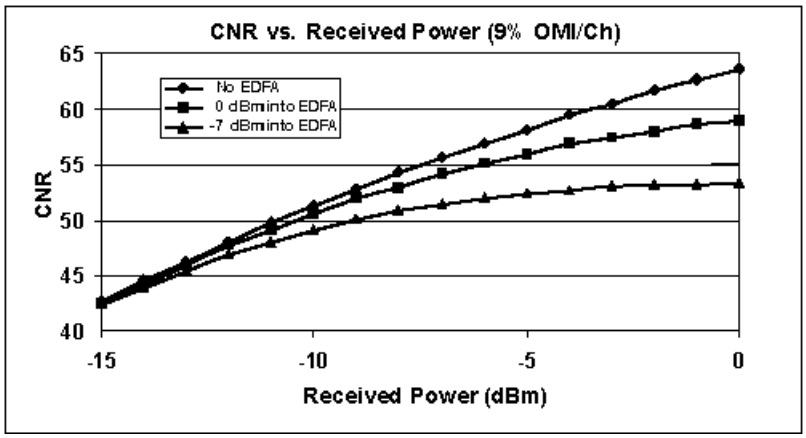

Optical Output

Wavelength: 1549.32-1560.61 nm
Output Power: 7 dBm
Flatness: < 1 dB peak-to-valley
Laser shutdown: DISABLE/ENABLE switch
Eye protection: Safety shutter

Model	Wavelength (nm)
HLD7805-W00	1549.32 - 1560.61
HLD7805-W01	1549.32
HLD7805-W02	1550.92
HLD7805-W03	1552.52
HLD7805-W04	1554.13
HLD7805-W05	1555.75
HLD7805-W06	1557.36
HLD7805-W07	1558.98
HLD7805-W08	1560.61

RF Input

Input level range: 23 to 32 dBmV
Operational bandwidth: 40 to 870 MHz
RF attenuator adjustment range: 10 dB in 0.1 dB steps
Impedance: 75 Ω
Return loss: > 16 dB
Level control: Manual

Element Management System - NETWatch™/HEM

HEM interface: RS-485, RS-232C connectors (in HLP 4200)

Power Requirements

Nominal: +24 VDC; supplied by HLP 4200 bus
Maximum: +28 VDC
Consumption: 26 Watts maximum

User Interface

Front panel:
- Bi-state status LED: Normal = Green, Alarm = Red
- Module selection indicator: Yellow LED
- Function slide switch and set-up adjustment
- Monitor point:
  - Laser RF drive monitor
  - Flatness: ± 1.5 dB
  - Return loss: > 16 dB
  - Connector type: Male GSK

Rear panel:
- Laser ENABLE switch
- Laser enabled: Yellow LED

Environmental

Operating temperature range: 0° to +50° C (+32° to 122° F)
Storage temperature range: –40° to +70° C (+32° to 158° F)
Automatic three speed fan adjustment at: 40° & 50° C (104° to 122° F)
Relative humidity: Maximum 85% non-condensing
Over temperature laser protection: Software and hardware

Physical

Dimensions: 2.6″ W x 4.4″ H x 11.7″ D
Weight: 3.6 lbs.
Mounting: HLP 4200 platform; one module slot
Optical connector type: SC/APC[6]
RF connector type: Standard F, RG-59 cable type (accepts 0.51 - 1.06 mm center conductor diameter)

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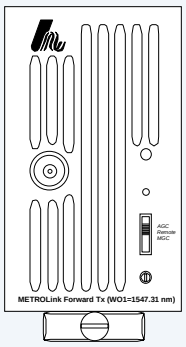
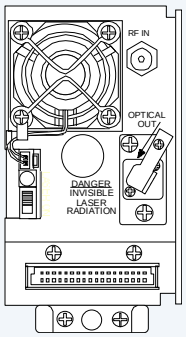
METROLink™ HLD 7805 DWDM Forward Transmitter



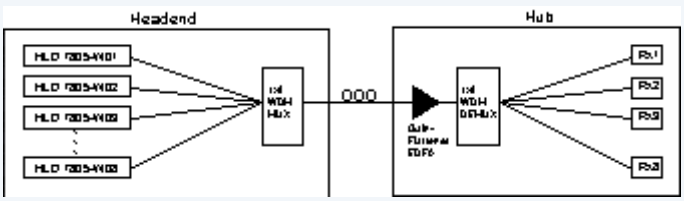


Product Description

Harmonic's METROLink HLD 7805 is a family of high performance DFB laser transmitter modules designed for forward path narrowcasting applications. The DFB laser's wavelength is stabilized and aligned to one of eight wavelengths on the ITU grid with 200 GHz (1.6 nm) spacing. Using Dense Wavelength Division Multiplexing (DWDM), digital narrowcast services can be carried on a single fiber and targetted by wavelength. The HLD 7805 transmitters can operate alone in local distribution and narrowcasting applications or in combination with Harmonic's METROLink family of gain flattened optical amplifers, wavelength selected broadcast transmitters and multiplexers and de-multiplexers for complete system solutions.

The HLD 7805 transmitter modules are compact, intelligent and easily configurable by means of the user-friendly interface, allowing for set-up in minutes. The transmitters can be set up via the HLP 4200WD platform front panel menu, the module front panel function slide switch and set-up adjustment, or via the NETWatch™ Element Management System.

Network Configuration



Continuous high performance and reliability of the transmitters are assured by a microprocessor and associated firmware which control and monitor all vital functions. Monitored functions include laser temperature and operating point, optical power, module temperature and composite RF drive level.

The optical components within the HLD 7805 transmitter module have been designed for ease-of-use and maintenance. The module features an optical connector on a removable plate on the back of the unit, facilitating simple cleaning and maintenance.

Advantages

The innovative design of the HLD 7805 transmitter and Harmonic's complete line of METROLink products offer many advantages to address the needs of today and tomorrow, making it the industry's leading solution for narrowcasting applications:

- Multiple wavelengths combined on a single fiber result in efficient fiber usage and cost and space savings.
- The passive optical network (PON)architecture increases system reliability, reduces downtime and minimizes hub space.
- Shares common platform with the METROLink gain flattened EDFA, return path transmitter and wavelength selecte broadcast transmitter.
- Single node receiver detects analog broadcast and digital narrowcast on separate wavelengths.
- Integrated RF pre-amplifier reduces transmitter drive level requirements.
- Integrated element management with SNMP compatibility.
- Microprocessor control of all key parameters provides consistent and optimum product performance and monitoring.
- 860 MHz bandwidth provides flexibility in RF channel allocation.
- Simple "plug and play" operation reduces time and cost of installation.

Applications

- Targeted digital services (digital video, Video on Demand (VOD), Internet, cable telephony, IP telephony)
- Digital video transport in native 64 QAM and 256 QAM formats
- Mixed-use analog and digital narrowcasting

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