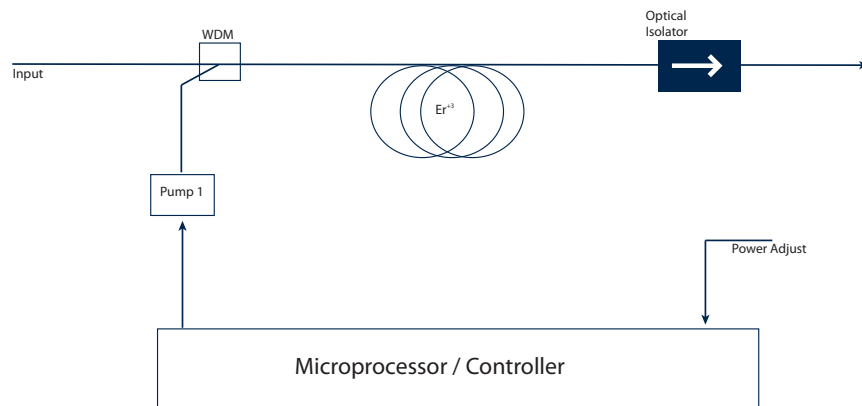


HIGHLIGHTS

- Integrated element management intelligence with SNMP compatibility, enables seamless communication with comprehensive network management systems, without additional cost or complexity.
- Microprocessor control of all key parameters provides consistent, optimum product performance and monitoring.
- Multiple wavelengths combined on a single fiber result in efficient fiber usage as well as cost and space saving
- Shares common platform with METROLink DWDM forward transmitter, DWDM return transmitter and wavelength selected broadcast transmitter.
- Simple “plug-and-play” operation reduces time and cost of installation.
- Cost-effective DWDM return operation.
- Compact size enables 10 optical amplifiers to fit in a 3-RU platform.

The Harmonic METROLink™ transmission system is a family of transmitters and optical amplifiers designed for 1550 nm-based network applications. The METROLink system provides a cost-effective solution for a variety of multiwavelength applications and architectures. Using Dense Wavelength Division Multiplexing (DWDM), digital narrowcasting services can be carried on a single fiber and targeted by wavelength. The METROLink product line consists of plug-in modules for the HLP 4200 broadband platform, including the HLD 78xx DWDM forward transmitter, HLD 72xx DWDM return transmitter and the gain flattened optical amplifiers. The HOA 7015RT return path EDFA allows cost-effective amplification of multiple return DWDM signals. This transmission system has been designed to complement Harmonic’s MAXLink™ transmitter family.

The HLP 4200 broadband platform is a 3-RU high rack mount housing designed to simplify headend operation. The stackable platform is the industry’s most compact system, also housing Harmonic’s MAXLink transmitters, optical switch, pre-amplifier, optical receiver, QAM modulators and element management-controlled power supply modules. The HLP 4200 platform provides for plug-and-play installation and operation through a user-friendly 40-character display and front panel push-button controls. As with all Harmonic products, METROLink modules have built-in element management capabilities.



Standard Configuration

OPTICAL OUTPUT

| | |
|--------------------------------|---|
| Wavelength | 1535 nm - 1565 nm |
| Output Power | +15 dBm (32 mW) |
| Optical Power Adjustment Range | 6 dB down from maximum |
| Input Range | -10 dBm to +10 dBm |
| Gain Tilt ¹ (dB) | 3dB for wavelength range 1535 - 1561nm |
| Noise Figure | 4.5 dB |
| Polarization Sensitivity | < 0.1 dB |
| Laser Shutdown | DISABLE/ENABLE switch |
| Eye Protection | Safety shutter |

NETWATCH™ ELEMENT MANAGEMENT SYSTEM

| | |
|--------------------|--|
| NETWatch Interface | RS-485, RS232C connectors (in HLP 4200) |
|--------------------|--|

POWER REQUIREMENTS

| | |
|-------------|-----------------------------------|
| Nominal | +24 VDC; supplied by HLP 4200 bus |
| Maximum | +26 VDC |
| Consumption | 19 Watts maximum |

USER INTERFACE

| | |
|---|-----------------------------|
| Front Panel | |
| Bi-state Status LED | Normal = Green, Alarm = Red |
| Module Selection Indicator | Yellow LED |
| Auto/Manual LED | Auto = Yellow |
| Function slide switch and set-up adjustment | |
| Rear Panel | |
| Laser ENABLE switch | |
| Laser disabled | 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: | 104° to 22° F 40° & 50° C |
| Relative Humidity | Maximum 85% non-condensing |
| Over Temperature Laser Protection | Software and hardware |

PHYSICAL

| | |
|------------------------|---|
| Dimensions (W x H x D) | 1.2" x 4.4" x 10.7" |
| Weight | 3.6 lbs. |
| Mounting | HLP 4200 platform; via use of HMC 4000 carrier |
| Optical connector type | SC/APC |

Note:

1. For optical input power per wavelength: $-10 \text{ dBm} < P < -2 \text{ dBm}$, and up to 16 wavelengths.