

Power Extender

A high power optical amplifier

Key benefits:

- Bridges long spans in amplified networks
- Can be used together with EDFA or Raman amplifiers
- Compact 1U chassis
- Managed as part of Terminal or Line amplifier node

The Power Extender is a powerful part of Transmode's TM-Series platform enabling optimized and cost efficient transport networks based on DWDM technology.



Boosting optical power in amplified networks

The Power Extender (OA26C/19) is a high output power EDFA-based amplifier that boosts the launched power by up to 26dBm.

Amplified networks have restrictions on total end-to-end distance as well as intermediate span lengths.

The Power Extender can boost the optical power while maintaining high OSNR values so that longer intermediate spans can be bridged or give the ability to skip a line amplifier site, enabling lower equipment and operational costs.

The Power Extender can be used in standard EDFA-based networks as well as networks using Raman amplifiers. The Power Extender is thus a powerful addition to the TM-Series platform strengthening its ability to address terrestrial, festooned and submarine long-haul applications.

Powerful but yet safe

The Power Extender is an EDFA amplifier and is classified as a Class 1M laser product although it typically provides output power of above 21 dBm. This is achieved via two parallel and independent eye safety mechanisms that shut down the amplifier in case of a fiber break, including open connectors.

Separate but yet integrated

A Power Extender can easily be combined with a DWDM Network Element (NE) by mounting the 1U chassis in the same rack and connecting the management port to the DWDM chassis via a RJ45 LAN cable and connecting the necessary optical fibers. From a management perspective the Power Extender then acts as an integrated part of the DWDM NE.

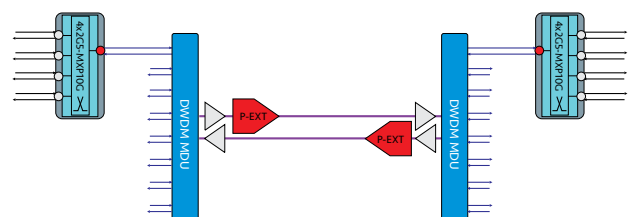


Fig. 1 Networking example

The figure shows a networking example where the Power Extender is combined with the standard EDFA Power Amplifiers to boost the optical power and extend the bridgeable distance.

Technical specifications:

Software release 13.0 or later

Wavelength Range	1529 – 1565nm
Composite Output Power	+26dBm minimum @ optimum gain
Gain Flatness (peak to peak)	1dB
Optimum gain	6,2dB
Noise Figure	8dB typ, 9dB max (max gain, min input power)
Laser Safety	Class 1M (CDRH 1040.10, IEC 60825-1)
Size	442 x 44 x 240 mm / 17,40 x 1,73 x 9,45 in (W x H x D)
Optical Connectors	E2000 on output port, LC on input port, LC on monitor port
Supply voltage	-36 to -76 VDC
Power consumption	Max 50W
Operating temperature	-55 to +55 °C / -67 to 131 °F

The specifications and information within this document are subject to change without further notice. All statements, information and recommendations are believed to be accurate but are presented without warranty of any kind. Contact Transmode for more details.

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