

XTM SERIES

POWER EXTENDER

A High-Power Optical Amplifier

The **Power Extender** is a powerful part of the Infinera XTM Series, which enables 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 erbium-doped fiber amplifier (EDFA)-based amplifier that boosts the launched power by up to 26 dBm.

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

The power extender can boost optical power while maintaining high optical signal to noise ratio (OSNR) values so that longer intermediate spans can be bridged or line amplifier sites can be skipped, 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 XTM Series, strengthening its ability to address terrestrial, festooned and submarine long-haul applications.

Powerful 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 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 an RJ45 LAN cable and connecting the necessary optical fibers. From a management perspective, a power extender configured in this way acts as an integrated part of the DWDM NE.



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

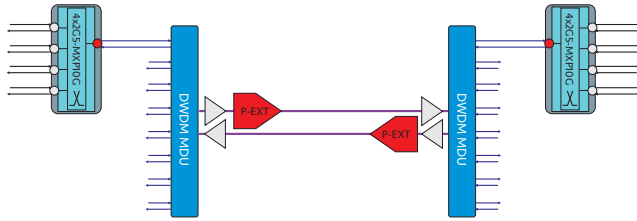


Fig 1. Networking Example.

The figure shows a networking example in which the power extender is combined with standard EDFA power amplifiers to boost optical power and extend the bridgeable distance.

Specifications

Wavelength Range	1529 – 1565 nm
Composite Output Power	+26 dBm minimum at optimum gain
Gain Flatness (Peak to Peak)	1 dB
Optimum Gain	6.2 dB
Noise Figure	8 dB typ, 9 dB 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 50 W
Operating Temperature	-55 to +55 °C / -67 to 131 °F

Specifications and Features Are Subject to Change

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