

Inquire about EDFA200G



Overview

Datasheet These Erbium-Doped Fiber Amplifiers (EDFAs) are engineered for a long operational lifespan, typically designed to function reliably A Switchable.

Key Takeaways

The EDFA200G is an Erbium-Doped Fiber Amplifier designed for high-speed optical amplification, supporting multiple channels in the C-band with low noise and stable output. Key Features

The EDFA200G is a C-band optical amplifier that can amplify signals across multiple channels simultaneously, typically supporting up to 48 channels at 100 GHz spacing or 96 channels at 50 GHz spacing in DWDM systems . It provides flat gain, low noise figure, and stable output, making it suitable for long-haul and high-speed optical transmission . The amplifier is engineered for long operational lifespan, often exceeding 10 years, due to robust thermal management, high-quality components, and rigorous testing .

Operational Modes

EDFAs like the EDFA200G generally support two main control modes:

- ACC (Automatic Current Control): The pump laser current is set by the user and automatically maintained to achieve a constant pumping current. The output power is proportional to the input signal, even when the input is weak .



- APC (Automatic Power Control): The user sets the desired output power, and the EDFA maintains it constant using a feedback loop. This mode minimizes output fluctuations when input power varies, ideal for line-type or power-type applications .

The EDFA200G is commonly used in:

- DWDM high-speed networks for long-haul transmission .
- System-level experiments where multiple EDFAs are required, benefiting from compact and low-power designs similar to the EFA-200C .
- Laboratory setups with benchtop units that allow computer control and GUI interfaces for precise gain and power adjustments .

Design and Integration

The amplifier typically includes:

- Erbium-doped fiber for signal amplification.
- Semiconductor pump lasers (often 980 nm) for excitation.
- WDM couplers and isolators to manage signal flow and prevent back reflections.
- Optional polarization-maintaining or random polarization configurations depending on system requirements . Its compact design allows easy integration into racks or experimental setups, and the modular control interface supports remote or automated operation.

Summary

The EDFA200G is a high-performance, reliable optical amplifier suitable for DWDM networks, laboratory experiments, and system-level optical setups. Its combination of multi-channel support, low noise, stable output, and flexible control modes makes it a versatile choice for modern optical communication systems .

Article Content

Datasheet

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A Switchable-Gain Optical Amplifier functioning in the flexible ...

This is the datasheet for the latest hardware to be added to the list: an all-new EDFA (Erbium Doped Fiber Amplifier)

Multi-channel Erbium doped fiber amplifier

The product is multi-channel EDFA of high flattening and high stable output. The kernel component of the

Pakistan Solution EDFA200G

Vanuatu Galvanized Cable Tray Cost Standards Smart Distribution Box for Smart Home Installation Method of Power Distribution

EDFA | Erbium-doped fiber amplifiers | NIR-SWIR

Our EDFAs are engineered to boost your laser's output power while retaining its critical beam

Miniature Telecom EDFA

Compact and Miniaturized versions of the telecom amplifier, in minimized footprint and power consumption.

Alnair Labs

The compact size is

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