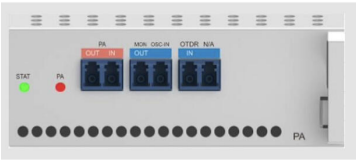
GF-6800-LA20/G20V

GF-6800-LA20/G20V / Gain support ±5dB adjustment

1. Product overview

GF-6800-LA20/G20V – C-Band EDFA Line Amplifier Module The GF-6800-LA20/G20V is a high-performance C-band Erbium-Doped Fiber Amplifier (EDFA) Line Amplifier designed for the GF-6800 DCI DWDM Optical Transmission System. The module provides in-line optical amplification for DWDM transmission networks, compensating for fiber attenuation and passive optical losses between network nodes. It is designed for Data Center Interconnect (DCI), metro, backbone and long-haul DWDM applications where additional optical amplification is required to extend transmission distance. The amplifier provides low-noise operation, excellent gain flatness and flexible gain and output-power control through integrated AGC, APC and ACC operating modes.



Simplified functional illustration

2. Key features

C-band in-line EDFA amplification • Designed for intermediate amplification points in DWDM links • Compensates for optical fiber attenuation • Compensates for passive MUX/DEMUX and other optical component losses

3. Applications

Data Center Interconnect (DCI) • Metro DWDM networks • Long-haul DWDM transmission • Backbone optical networks • Intermediate optical amplification sites • High-loss fiber spans • Point-to-point DWDM links • 100G / 200G / 400G coherent transmission • Multi-channel C-band DWDM systems

4. Technical data

Product type: EDFA Line Amplifier Module	Designed for intermediate amplification points in DWDM links
Model: GF-6800-LA20/G20V	Compensates for optical fiber attenuation
Platform compatibility: GF-6800 DCI DWDM Optical Transmission System	Compensates for passive MUX/DEMUX and other optical component losses
Amplifier type: Line Amplifier (LA)	Extends DWDM transmission distance
Amplifier technology: Erbium-Doped Fiber Amplifier (EDFA)	Supports multi-channel DWDM signals
Supports dual-amplifier configuration: 2 × LA	Suitable for coherent optical transmission
Chassis occupancy: 2 slots	Supports 2 × independent LA amplification channels
C-band in-line EDFA amplification	Low-noise optical amplification
	Integrated Variable Optical Attenuator (VOA)

5. Recommended operating conditions

Module dimensions: 216 × 254 × 42 mm (W × D × H)	Relative humidity: 5% to 95%, non-condensing
Operating temperature: -10°C to +60°C	Maximum power consumption: =30 W
Storage temperature: -40°C to +80°C	Modular GF-6800 card design

GF-6800-LA20/G20V

6. Optical characteristics

Optical band: C-band	Polarization Dependent Loss (PDL): =0.3 dB
Operating wavelength range: 1528–1565 nm	Polarization Dependent Gain (PDG): =0.4 dB
Maximum optical output power: up to +20 dBm	Polarization Mode Dispersion (PMD): =0.5 ps
Supported gain range: 8–33 dB	Pump leakage: =-29 dBm
Typical noise figure: 5.0 dB	Return loss: =45 dB
Typical gain flatness: 1.0 dB	VOA gain adjustment: ±5 dB
Adjustable input threshold: down to -34 dBm	Excellent gain flatness

7. Digital diagnostics and management

Automatic Gain Control (AGC)	VOA gain adjustment range: ±5 dB
Adjustable AGC gain	Integrated optical power monitoring
Automatic Power Control (APC)	MON port for optical power monitoring
Adjustable APC output power	OSC interface for remote network management
Automatic Current Control (ACC)	Supports 1510 nm OSC interface
Adjustable VOA	Supports 1625 nm OTDR interface
	Remote monitoring through the GF-6800 management platform

8. Safety and regulatory

The product page does not specify regulatory certifications or a laser safety class.

9. Ordering information

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10. General notes

Equality signs (for example “=30 W”) and source asterisks are retained as published; no different limit is inferred. • Technical values and product image: GLOBALfiber product page, Technical Info. Unspecified parameters have not been inferred. Accessed 06.09.2026.

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