

FWA-1550G Series, Gain fiber amplifier DWDM EDFA







1. Product Description

FWA-1550G DWDM EDFA (Erbium Doped Fiber Amplifier) is a C-band flat gain optical fiber pre-amplifier, which is mainly installed in front of the receiving device. Ultra-low optical power input: $-30 \sim -15$ dBm, gain is fixed $10 \sim 30$ dB output to improve the sensitivity of transmitting and receiving equipment and achieve the purpose of extending the signal for long-haul transmission.

FWA-1550G series gain fiber pre-amplifier uses advanced electronic control technology and complete software functions. By optimizing the optical path, it has a wide operating wavelength range, low noise, and excellent gain flatness characteristics.

[Application] (1) Line amplify (2) Power amplify (3) Optical distribution system (4) SFP, SDH, ATM long-haul transmission (5) Video, Ethernet optical transmission system

2. Product feature

- ◆ With excellent optical performance, advanced electronic control technology and complete software functions, the system can obtain excellent CNR by optimizing the optical path and minimizing the NF of EDFA.
- ♦ Reliability: Adopt 19" 1U standard chassis, built-in high performance modular dual switching power supply, can work in AC 85 ~ 265V city network voltage. DC 48V power supply option is available as well. Dual hot and reserved power supply with Chassis automatic heat dissipation control.
- ◆ Intuitive: The pump laser is the most expensive component. The built-in microprocessor monitors the working status of the pump laser, and the working parameters are displayed on LCD.
- Network management Interface: Web transponder is line with the national standard and compatible with the SCTE HMS standard, achieving WEB monitoring function.



- ◆ The working wavelength is C band, which meets the communication technology requirements of DWDM systems.
- ◆ Excellent gain flatness (GF < 1.0dB) makes the optical power gain of each channel flat.

3. Technical Parameters

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Items	Unit	Performance Index
Optical Operating Wavelength	nm	1538∼1565(C-Band)
Input Optical Power Range	dBm	-30~-15
Signal Gain	dB	10 \sim 30(Gain value can be customized)
Output Power	dBm	-20~+15
Noise Ratio	dB	3.8~5.5
Gain Flatness	dB	<±0.3
Optical Power Output Stability	dB	<±0.5
Polarization Sensitivity	dB	<0.2
Polarization Mode Dispersion	ps	<0.5
Optical connector (IN/OUT)		LC/UPC,SC/UPC,FC/UPC
Pump Operating Number	N	1~3
Saturated Output Power	dBm	-10 \sim +10 (Output power can be customized,
		adjustable)
Power Supply	VAC	$90{\sim}265$ (Hot-pluggable dual power supply)
	VDC	-48 (Hot-pluggable dual power supply)
Working Temperature	°C	0~50
Case Size	mm	482.6×387×44

4. Product model series

FWA-1550G–10, Optical input power : $-30 \sim -15$ dBm, Gain: 10dB, Output power: $-20 \sim -5$ dBm FWA-1550G–15, Optical input power : $-30 \sim -15$ dBm, Gain: 15dB, Output power: $-15 \sim 0$ dBm FWA-1550G–20, Optical input power : $-30 \sim -15$ dBm, Gain: 20dB, Output power: $-10 \sim +5$ dBm FWA-1550G–25, Optical input power : $-30 \sim -15$ dBm, Gain: 25dB, Output power: $-5 \sim +10$ dBm FWA-1550G–30, Optical input power : $-30 \sim -15$ dBm, Gain: 30dB, Output power: $0 \sim +15$ dBm

