



EDFA Module

1. Product Description

Beogold's low noise figure EDFA module is widely used in fiber optic sensing and telecommunications. It consists of a 980nm or 1480nm pump laser to provide energy and it operates in AGC, ACC or APC mode.

Based on fine temperature control technology inside, it provides excellent temperature characteristics even under harsh working environment at the temperature of -20~60°C.

It features high output power, a large gain, and a variable gain range >20dB. It can work across C-band and L-band meeting customers' diverse needs.

It uses DC+5V/GND or DC+3.3V/GND as power supply, user-friendly RS232 serial port as communications interface to set module parameters, enabling real-time parameter monitoring, and remote network management and control.

2. Features

- High output power up to 23dBm
- Flexible control mode
- High stability and reliability
- Operating temp. -20~60°C
- Custom design output power and configuration



3. Applications

- Long haul optical fiber communication
- Dense Wavelength Division Multiplexing
- Fiber optic sensing
- Oil and gas field monitoring

4. Optical Specifications

Parameter	Unit	Minimum	Typical	Maximum
Operating Wavelength Range	nm	1528	1550	1563
Total Input Power	dBm	-	0	-
Saturation Output Power @Pin=0 dBm	dBm	-	-	23
Noise Figure @Pin=0 dBm	dB	-	5.5	-
PDG	dB	-	-	0.5
PMD	PS	-	-	0.5
Input/ Output Isolation	dB	40	-	-
Output Power Adjustability	Yes			
Fiber Type (Single Mode)	SMF 9/125um NA=0.13			
Fiber Length	Customized			
Connectors	FC/APC or custom design			
Operating Temperature Range	°C	-20	-	+60
Storage Temperature Range	°C	-40	-	+85
Humidity	%	5	-	90
(1) Test result at single temperature.				
(2) No condensing.				



5. Mechanical Structure

Structure Type	Parameter	Specification	Unit	Remarks
Module	Dimension	90x70x15/90x70x12	mm	
	Power Interface	DC+5V/GND or DC+3.3V/GND		Typical
	Output Pigtail	SM		
	Communication Interface	RS-232		Optional

6. Electrical Specifications

Structure Type	Parameter	Specification	Unit	Remarks
Module	Power Supply	DC+5V/GND or DC+3.3V/GND		
	Power Consumption	<15	W	At room temperature

7. Communication Mode

Structure Type	Parameter	Specification
Module	Communication Interface	26-Pin serial port
	Communication Protocol	RS232
	Communication User Interface	Read and set output power

8. Ordering Information

