



Mini EDFA Module

1. Product Description

Beogold's mini EDFA module is widely used in optical fiber sensing and communications. It consists of a 980nm or 1480nm pump laser to provide energy and operates in AGC, ACC or APC mode.

With fine temperature control technology inside, it provides excellent temperature characteristics even under harsh working environment at the temperature of -40~70°C.

Beogold's EDFA provides 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 as power supply, user-friendly RS232 serial port as communications interface for easy internal configuration, enabling real-time parameter monitoring, and remote management and control of the line.

2. Features

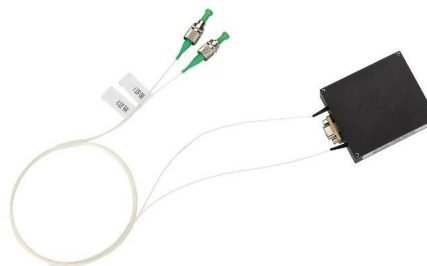
Low noise figure

Flexible control mode

High stability and reliability

Customized optical output power

Mini and compact package



3. Applications

DWDM

Military & defense

Optical fiber sensing

4. Optical Specifications

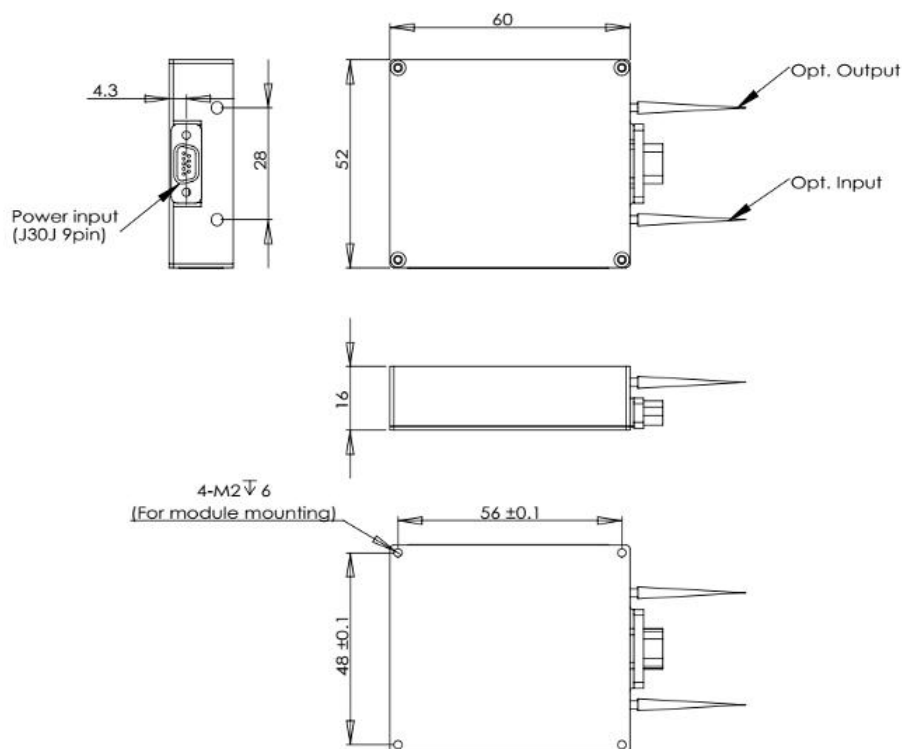
Parameter	Unit	Min.	Typical	Max.	Remarks
Operating Wavelength	nm	1528	1550	1563	
Input Power	dBm	-	0	-	
Saturation Output Power	dBm	-	17	20	
Noise Figure @Pin=0dBm	dB	-	5.5	-	
Gain Flatness	dB	-	1.5	-	
Polarization Dependent Gain	dB	-	-	0.5	
Polarization Mode Dispersion	ps	-	-	0.5	
Input / Output Optical Isolation	dB	40	-	-	
Operating Mode	AGC, APC(Default), ACC				
Fiber Type	SMF-28 900um Loose tube				Optional
Fiber Length	1.00±0.2m				Optional
Fiber Connector	FC/APC				Optional
Operating Temperature Range	°C	-40	-	+70	
Storage Temperature Range	°C	-55	-	+85	
Humidity	%	5	-	90	
Power Interface	DC +5V/ GND Serial power supply				



Power Consumption	W	<10	At room temperature
Communication Interface	J30J 9pin LVTTTL Level		
Communication Protocol	RS232		
Communication User Interface	Can read or set optical output power		
(1) Test at single temperature; (2) No condensing.			

5. Mechanical Structure

Dimensions (L x W x H): 60x52x16mm. Dimensions shown in mm.



6. Pin Definition

Pin	Symbol	Definition	Level	Description
1	GND	P		GND
2	NC	F		Reserved
3	TXD	O	LVTTTL	Serial Output
4	RXD	I	LVTTTL	Serial Input
5	NC	F		Reserved
6	+5V_VCC	P		+5V Power Supply Input
7	GND	P		GND
8	+5V_VCC	P		+5V Power Supply Input
9	NC	F		Reserved

Notes: P: Power; I: Input; O: Output; F: Floating.



7. Ordering Information

