



15dBm Mini Size EDFA Module

▶▶ Description

Compact Mini Size EDFA Module is designed for optical communication and CATV systems. It can be used as a power amplifier, in-line amplifier or pre-amplifier based on system architecture. It features stable output power, low noise and power consumption. Compact footprint makes it easy to be installed where it is needed, adding to flexibility in network design. To achieve high performance, world brand pump lasers and erbium-doped fibers are used; optical isolators are added at both input and output.

Both input and output signals are sampled and monitored with a feedback circuit. APC (automatic power control), AGC (automatic gain control) and ACC (automatic current control) circuits are designed into the amplifier to ensure high output power stability and reliability. Based on integrated power monitoring circuits, this amplifier features a RS-232 interface enabling connectivity to customer's control system.

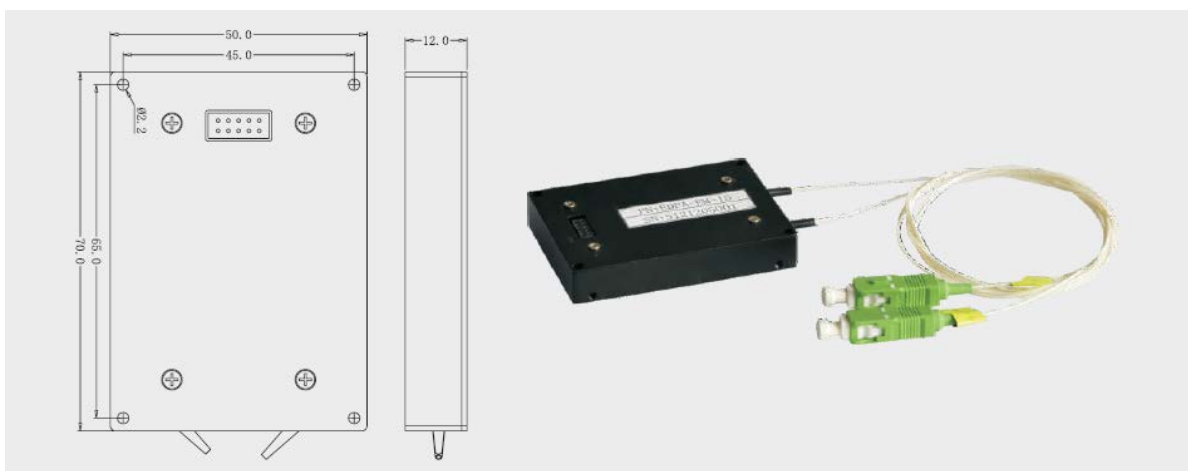
▶▶ Features

- Mini size: 70×50×12mm
- Low cost
- High output power and high gain
- Low noise figure
- Low power consumption
- Wide operating temperature range

▶▶ Applications

- Analog and digital CATV systems
- Optical communication systems
- LANs and WANS
- In-line amplification
- DWDM subsystems

▶▶ Typical Mechanical Structure



Mechanical Outline: 70×50×12mm Module

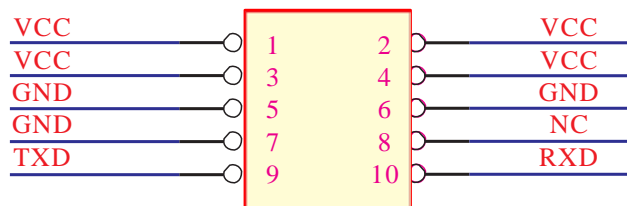
**►► Specifications:****Optical Characteristics**

Parameter	Unit	Min.	Typ.	Max.	NOTES
Operating wavelength	nm	1530	-	1565	
Optical input power	dBm	-3	-	+10	
Saturation output power(1)	dBm	-	+15	+17	
Control mode		AGC, APC, ACC			Selectable
Noise figure	dB	-	6.0	7.0	0dBm @1550 nm
Return loss	dB	40			EDFA off
Output fiber type		SMF-28e 900µm Jacket			
Connector type		SC/APC			Other type upon request

*Note: (1) Input power=-3dBm

Mechanical & Environmental Characteristics

Parameter	Unit	Typ.	Notes
Dimensions(LxWxH)	mm	70x50x12	Module
Weight	g	60	
Operating temperature	℃	-10 to + 65	
Storage temperature	℃	-30 to + 85	
Humidity	%	10 to + 90	

►► Pin Out**Electrical PIN Assignment****Pin Definitions**

- TXD: RS-232 Txd.
- RXD: RS-232 Rxd.
- GND: Ground.
- VCC: +5V power supply ($\pm 10\%$), max. 3A each pin.
- NC: Not connected.

Electrical Characteristics

Parameter	Unit	Symbol	Min.	Typ.	Max.
Power supply	V	V	4.5	5	5.5
Power consumption	W	P	-	1.5	2.5

►► Order Information:

EDFA-EM-15-XX/XXX

Optical connector: FC/APC, SC/APC or upon request