C-band Modular Single-mode Erbium-Ytterbium Co-doped Fiber Amplifier, 40dBm

Product Description

The high-power Er-Yb co-doped EDFA module uses single-mode lasers and multi-mode pump lasers as energy sources, and performs gain conversion between pump light and signal light through Er-Yb co-doped optical fiber. The maximum output power can reach 40dBm. It has been widely used in cable TV systems and FTTH. The product can work in ACC/APC/AGC mode

and adopts highly achievable temperature control technology, so that the product has good thermal performance in a wide temperature range.

Product features

Maximum Output Power: 10 W、 High Gain Coefficient、 Wide Wavelength Range

Part Number

MP-EYDFA-C-10W-SM-M

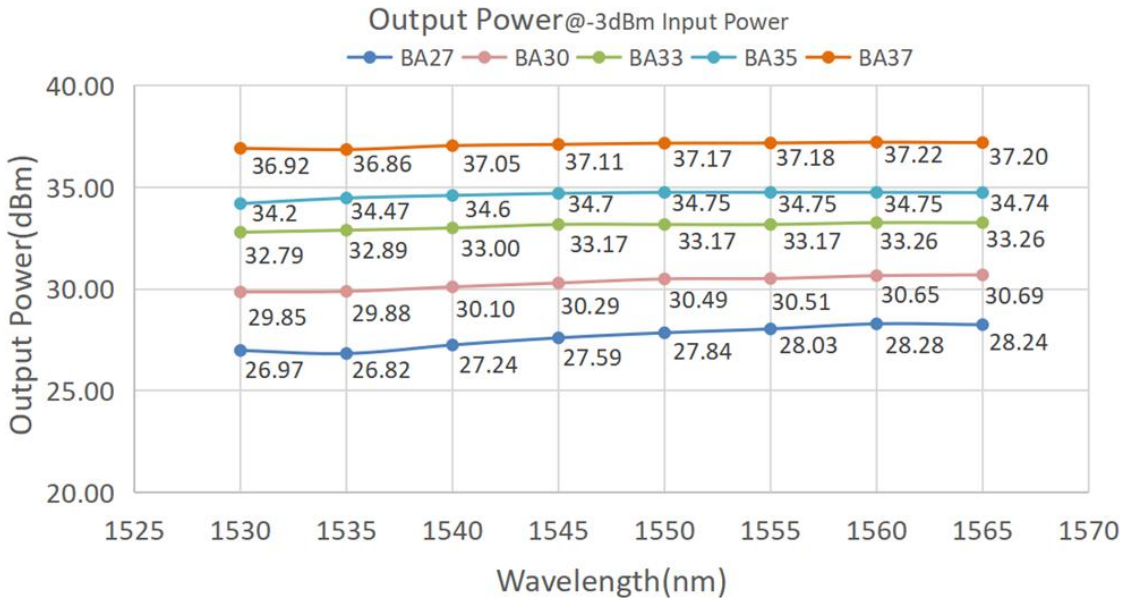
Application area

Fiber Optic Communication、 Fiber Optic Sensing、 Fiber Laser

Core parameters

Wavelength Range	Saturated Output Power	Connector
1535-1565nm	40dBm	FC/APC

General Parameters



Parameter

Optical indicators	Unit	Typical	Notes
Wavelength range	nm	1535~1565	
Input power	dBm	-6~+10	
Saturated output power	dBm	27/30/33/35/37/40	@-3dBm input
Adjustable output power range	-	10%~100%	
Noise figure	dB	<6.0	
Gain flatness	dB	⩽1	@Different wavelengths

			are amplified separately
Polarization-dependent gain	dB	<0.5	
Polarization mode dispersion	ps	0.5	
Input/output isolation	dB	>35	
Optical power monitoring	-	Input optical power monitoring, output optical power monitoring	
Pigtail type	-	SMF-28	
Pigtail connector type	-	FC/APC	For power testing only
Working mode		Automatic current control (ACC)/Automatic power control (APC)	

Electrical and environmental parameters		benchtop	Module
Control mode		Key	RS232 Serial communication
Communication interface		Optional	DB9 Female
Power supply		100~240VAC,<150W	12V DC,<120W
Dimensions	Power 27/30/33/35dBm	260(W)×320(D)×120(H)mm	125(W)×150(D)×31.5(H)mm
	Power 37/40 dBm	360(W)×350(D)×120(H)mm	139(W)×235(D)×70(H)mm *Note
Operating temperature range		-5~+35°C	
Operating humidity range		0~70%	

Note: The 37dBm and 40dBm modules are equipped with built-in cooling fans

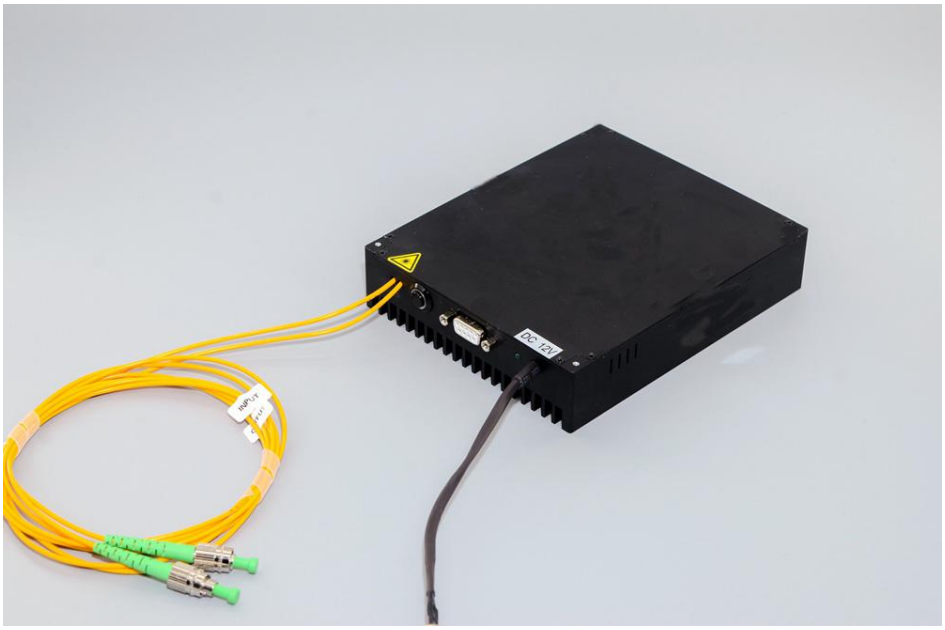
Ordering information/model					
EYDFA	Operating wavelength	Amplifier type	Output type (dBm)	Fiber type	Package method
	C=C band	HP-BA=high power BA amplifier	27/30/33/35/37/40	SM=single mode fiber	M=module B=benchtop

*Note 1:

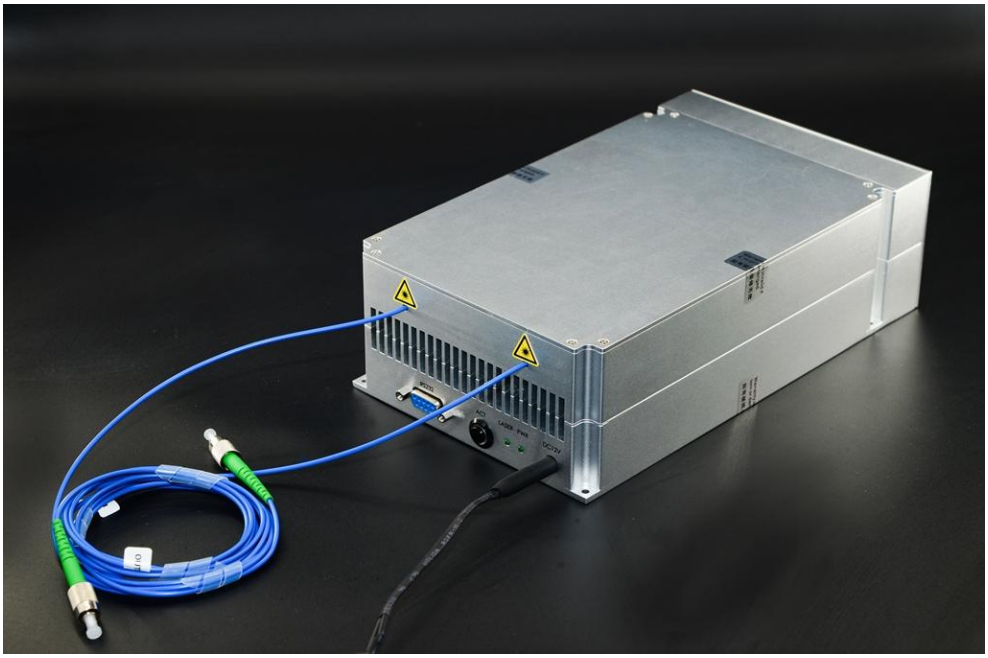
ACC mode - automatic current control: the user sets the EDFA pump operating current, and the EDFA automatically locks it to achieve constant pump current. When the input optical power fluctuates, the output power will also fluctuate accordingly. It is applicable to all EDFA models. PA amplifiers only support ACC mode.

APC mode - automatic power control: the user sets the EDFA signal light output power, the PD automatically monitors and feedbacks the output power, and the EDFA controls and adaptively adjusts the pump to achieve output signal stability. The power adjustment range in APC mode is usually 10%~100%. The advantage of APC mode is that when the input optical power fluctuates, the EDFA will reduce the output power fluctuation as much as possible. It is applicable to power-type and line-type EDFA, but not suitable for low repetition frequency pulse signals.

benchtop: 260(W) × 320(D) × 120(H) mm



0.5W~3W High Power Module (150 × 125 × 31.5 mm)



5W~10W High Power Module (139 × 235 × 70 mm)