# CEFA-C-PB-HP SERIES CW ERBIUM FIBER AMPLIFIER C-BAND HIGH POWER

#### **FEATURES**

- Up to 42 dBm of saturated output power
- Low noise figure
- Preamplifier built-in for low input power
- Polarization-maintaining available
- Narrow linewidth (<100kHz) amplification
- Choice of turnkey benchtop or module
- Very compact module up to 30 dBm
- Low power consumption

#### APPLICATIONS







Optical component testing Free space communications / FTTH/CATV networks / Remote sensing (LIDAR) Test and measurement / Microwave optics Non-linear optics

### 6 Platforms



## Description

The CEFA-C-PB-HP series Erbium doped fiber amplifiers are designed for single channel amplification in the C-band, up to 42 dBm of saturated output power.

The series include polarization-maintaining models and narrow linewidth amplification option.

These products are available in user-friendly turnkey benchtop instruments or in modules. In particular, very compact MSA type modules are available up to 30 dBm output power.

Built with several stages of amplification, these devices can be operated at low input power, down to -20 dBm. They also offer excellent optical noise figure and high optical signal to noise ratio at the output.

Their wide range of operation make these amplifiers suitable for many applications.





















Optical Specifications	Model									
@ 25°C	CPB25	CPB27	CPB30	CPB33	CPB37	CPB40	CPB42			
Mode of operation	CW									
Polarization	Random (SM) or linear (PM with PER>20dB)				Random (SM) or linear (PM with PER>17dB)					
Output power (-6dBm input)	25dBm	27dBm	30dBm	33dBm	37dBm	40dBm	42dBm			
Wavelength range		1540-1	565nm	1545-1565nm						
Input power range	-20 to 0dBm									
Noise figure (-6dBm, 1550nm input)	<5dB for SM, <5.5dB for PM <5.5dB for SM, 6dB for PM			<6.5dB for SM, 7.5dB for PM						
Input monitoring	Yes									
Output monitoring	Yes				Yes (option)					
Control mode	ACC, APC				ACC, APC (option)					
APC Tunability	10 to 100%									
Power stability (rms over 1hr)	<1%			<2%						
Narrow linewidth (<100kHz) amplification	Yes			Yes (option)						
Optical port fiber type	SMF28 or PANDA									
Input / output termination	FC/APC, SC/APC FC/SPC, SC/SPC			FC/AP(	FC/APC, SC/APC, E2PS, C1					
Power consumption*	15W	20W	30W	50W	100W	150W	200 W			
Associated platform	B202, M102, M301 B202, M			B202, M301	B203,	M403	B301			

Platform Specifications	Platform type								
	B202, B203	B301	M102	M301	M403				
Voltage	84 to 264 V	AC, 47-63Hz	5 to 12 VDC	21 to 24 VDC					
Control Interface	Front panel	and RS232	RS232						
Optical interface	3mm P	VC, 1m	900μm PVC, 1m	3mm PVC, 1m					
Warm-up time	< 5min								
Dimensions	448x446x88 mm 2U 19"	448x446x133 mm 3U 19"	90x70x12 mm	230x130x26 mm	200x50mm				
Weight	< 1	5 kg	< 200 g	< 1200 g	<1800g				
Operating case temperature	+15°C t	o +35°C	-20°C to +65°C						
Storage temperature	-20°C to	o +55°C	-40°C to +85°C						

<sup>\*</sup> Power consumption for modules

## Ordering information







