

# CEFA-C-PB-HP SERIES

## CW ERBIUM FIBER AMPLIFIER C-BAND HIGH POWER

1.5  $\mu\text{m}$

### KEY FEATURES

- Up to 42 dBm of saturated output power
- Low noise figure
- Pre-amplifier for low power input
- Polarization-maintaining (optional)
- Narrow linewidth amplification (<100 kHz)
- Benchtop or OEM module versions available
- Very compact OEM module (up to 30 dBm) available
- Low power consumption
- High reliability

### APPLICATIONS



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

### Description

**CEFA-C-PB-HP series are Erbium doped fiber amplifiers designed for single channel amplification. These C-band amplifiers deliver up to 42 dBm of saturate output power.**

The serie includes polarization-maintaining OEM models and narrow linewidth amplification options.

Keopsys develops different platforms :

- User-friendly turnkey benchtop instruments, directly monitoring from front face.
- Very compacts modules, in particular the MSA module platform (M102) with up to 30 dBm output power.
- Both benchtops and OEM modules can be controlled with a PC via RS232 using our B2V2 software.

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 operations make these amplifiers suitable for many different applications.

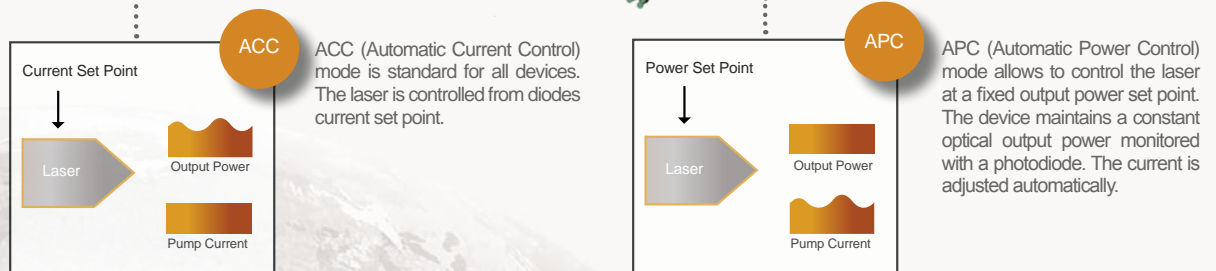
Crédit photo plateforme M102, B130 : Wyecs Prod

### 6 Platforms



### Modes of operation

The devices offer several modes of operation :



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V2.4

Optical Specifications @ 25 °C	CEFA-C-PB-HP						
	Mode of operation	CW					
Polarization	Random (SM) or linear (PM with PER>20 dB)				Random (SM) or linear (PM with PER>17 dB)		
Output power (-6 dBm input)	25 dBm	27 dBm	30 dBm	33 dBm	37 dBm	40 dBm	42 dBm
Wavelength range	1540-1565 nm				1545-1565 nm		
Input power range	-20 to 0 dBm						
Noise figure (-6 dBm, 1550 nm input)	<5 dB for SM, <5.5 dB for PM		<5.5 dB for SM, 6 dB for PM		<6.5 dB for SM, 7.5 dB for PM		
Control mode	ACC, APC				ACC, APC (option)		
APC Tunability	10 to 100 %						
Narrow linewidth (<100 kHz) amplification	Included				Option		
Optical port fiber type	SMF28 or PANDA						
Input / output termination	FC/APC, SC/APC FC/SPC, SC/SPC			FC/APC, SC/APC, E2PS, C1			

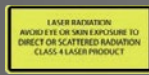
The CEFA-C-PB-HP is available as benchtop or as OEM module.

**RELIABILITY**

The Keopsys range of fiber amplifiers are manufactured with tested components and are submitted to several inspections during the manufacturing process under a rigorous quality management certified in accordance with the ISO 9001:2008 standard. Our all-in-fiber systems offer maintenance free operation. Countless units are continuously running in demanding environments with no failure.

**GUARANTEE**

Our fiber systems are under 1 full year parts and labor guarantee. We offer a warranty extension of 1 or 2 years. Please contact us.



Keopsys undertakes a continuous and intensive product development program to ensure that its products perform to then highest technical standards. As a result, the specifications in this document are subject to change without notice.