# CEFA-C-PB-HP

### CW ERBIUM FIBER AMPLIFIER C-BAND HIGH POWER





The CEFA-C-PB-HP series are Erbium Fiber Amplifiers designed for single channel amplification in the C-Band.

These amplifiers can deliver a saturated output power up to 42 dBm. They include a Pre Amplifier stage which allows them to be seeded with low input power (down to -20 dBm). They offer a very low noise figure and a high optical signal to noise ratio (OSNR) at the output.

Their unique optical design allows the amplification of narrow linewidth sources. The series includes polarization maintaining models.

The CEFA-C-PB-HP are available in benchtops or compact OEM modules. The benchtop platforms offer the possibility to control the amplifier via the front panel or remotely via serial port. The B130 platform also includes an Ethernet port. Both models offer robustness and reliability.

## Key features —

- Up to 42 dBm of saturated output power
- Low noise figure
- Preamplifier built-in for low power input
- Polarization-maintaining (optional)
- Narrow linewidth amplification
- Benchtop or OEM module versions available
- Low power consumption
- High reliability

## What applications

- Optical component testing
- Atomic cooling
- Quantum optics
- Nano technologies
- Tests and measurements
- Microwave optics
- Non-linear optics
- Free space communications

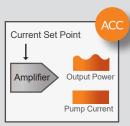




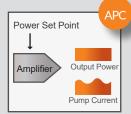


#### Modes of operation

The devices offer several modes of operation:



ACC (Automatic Current Control) mode is standard for all devices. The amplifier is controlled from diodes current set point.



APC (Automatic Power Control) mode allows controlling the amplifier at a fixed output power set point. The device maintains a constant optical output power monitored with a photodiode. The current is adjusted automatically.

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<b>Optical Specifications</b>	CEFA-C-PB-HP						
@ 25 °C							
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 Lumibird range of fiber lasers 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 9001:2015 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 warranty. We offer a warranty extension of 1 or 2 years. Please contact us.

For ordering information and custom solutions, please contact us: websales@keopsys.com









Lumibird 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.

Lumibird has locations across the globe that are available to provide support for any product, service or inquiry. Visit www.lumibird.com to connect with any of our global sites.

