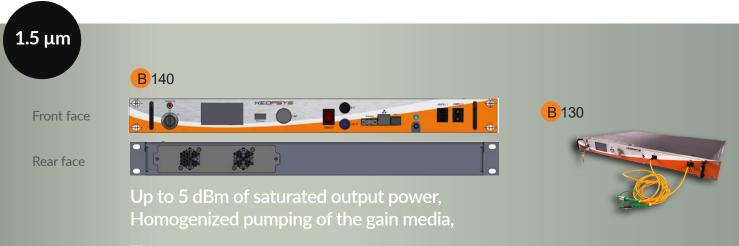
# CEFA-C-BD

### ONE OR TWO BI-DIRECTIONAL FIBER AMPLIFIERS IN ONE RACK





The CEFA-C-BD series are Erbium Fiber Amplifiers for bidirectional amplification.

They are designed to amplify very weak optical signals, down to -60 dBm and can deliver a saturated output power up to +5 dBm. They offer a very low noise figure and a high optical signal to noise ratio at the output.

The CEFA-C-BD amplifiers are real bidirectional fiber amplifiers, which means that the two 1550 nm signals are travelling in the same optical fiber. This unique optical design is therefore interesting for application requiring the same propagation time in both directions.

The CEFA-C-BD series are available in 1U turnkey benchtops and can integrate one or two BD amplifiers in the same 1U rack. The amplifiers can be controlled via the front panel or remotely via serial USB and Ethernet ports.

### – Key <mark>features</mark> –

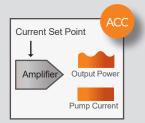
- Two bi-directional amplifiers in one rack
- Up to 5 dBm of saturated output power
- Homogenized pumping of the gain media
- Easy integration in telecom networks
- Low power consumption
- Low input power range
- Low ASE
- USB RS232 and Ethernet ports

## What applications -

- Very high speed data transmission and communication
- Two way optical frequency comparisons
- Optical reference frequency
- dissemination
- Temporal variation of fundamental constant
- Atomic clock comparison
- Relativistic geodesy
- Navigation

### Modes of operation

The devices offer one mode of operation :



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

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Optical Specifications	CEFA-C-BD
@ 25 °C	
Wavelength range	1540 – 1565 nm
Saturated output power	Up to 5 dBm
Number independent amplifiers	1 or 2
Gain	12 to 21 dB
Input power range	-50 to -10 dBm (option -60 dBm* IP1)
Polarization	Random
Output monitoring	Automatic Current Control, ACC
Power stability (rms over 1 hr)	< 1 %
Optical port fiber	SMF 28
Input/output termination	FC/APC (other on request)
Associated platform	B140

### The CEFA-C-BD is available as turn key benchtop.

### RELIABILITY

The Lumibird 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 9001:2015 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.

