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

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

**@ 25 °C**

<table>
<thead>
<tr>
<th>CEFA-C-PB-HP</th>
<th>Mode of operation</th>
<th>CW</th>
<th>Random (SM) or linear (PM with PER&gt;20 dB)</th>
<th>Random (SM) or linear (PM with PER&gt;17 dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Polarization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Random (SM) or linear (PM with PER&gt;20 dB)</td>
<td></td>
<td>Random (SM) or linear (PM with PER&gt;17 dB)</td>
<td></td>
</tr>
<tr>
<td><strong>Output power (-6 dBm input)</strong></td>
<td>25 dBm</td>
<td>27 dBm</td>
<td>30 dBm</td>
<td>33 dBm</td>
</tr>
<tr>
<td><strong>Wavelength range</strong></td>
<td>1540-1565 nm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Input power range</strong></td>
<td></td>
<td></td>
<td>-20 to 0 dBm</td>
<td></td>
</tr>
<tr>
<td><strong>Noise figure (-6 dBm, 1550 nm input)</strong></td>
<td>&lt;5 dB for SM, &lt;5.5 dB for PM</td>
<td>&lt;5.5 dB for SM, 6 dB for PM</td>
<td>&lt;6.5 dB for SM, 7.5 dB for PM</td>
<td></td>
</tr>
<tr>
<td><strong>Control mode</strong></td>
<td>ACC, APC</td>
<td>ACC, APC (option)</td>
<td></td>
<td></td>
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<tr>
<td><strong>APC Tunability</strong></td>
<td></td>
<td>10 to 100 %</td>
<td></td>
<td></td>
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<tr>
<td><strong>Narrow linewidth (&lt;100 kHz) amplification</strong></td>
<td>Included</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Optical port fiber type</strong></td>
<td>FC/APC, SC/APC</td>
<td>SMF28 or PANDA</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Input / output termination</strong></td>
<td>FC/APC, SC/APC, E2PS, C1</td>
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</tbody>
</table>

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

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### 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.

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### 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.

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Lumibird undertakes a continuous and intensive product development program to ensure that its products perform to the 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.

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V1.0