

# PEFA-SP-C

PULSED ERBIUM FIBER AMPLIFIER

1.5  $\mu\text{m}$  SHORT PULSE FIBER AMPLIFIER

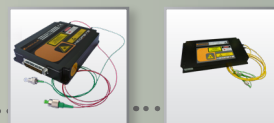


1.5  $\mu\text{m}$

B 130

M 201

M 301



Femto and picosecond pulse amplification,  
Pulse distortion free up to 1 KW,

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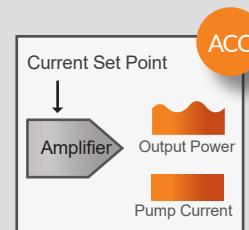
The PEFA-SP-C series is a range of 1.5 $\mu\text{m}$  pulsed fiber amplifiers specially designed to amplify femtosecond and picosecond sources up to 1kW without pulse distortion. The all-in-fiber designs offer an amplification with a low noise figure, a very low dispersion and a high gain over the C-band from 1535nm to 1565nm. Solutions are available with an average power up to 33dBm and with standard or polarization maintaining fiber.

The PEFA-SP-C amplifiers are commonly used for applications such as high peak power generation, non-linear optics, high speed transmission systems and supercontinuum generation.

The PEFA-SP-C series is proposed in turn-key easy 1U rack with a user-friendly front panel, a RS232 communication through a USB connector and Webpages/Telnet/SSH/SNMP2 through a RJ45 connector. OEM modules are also available with a microcontroller for internal controls, alarms, and RS232 communications making the amplifier compatible with all systems.

## 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.

## Key features

- Femto and picosecond pulse amplification
- Pulse distortion free up to 1 KW
- Average power up to 33 dBm
- Operating wavelength from 1535 to 1565 nm
- Pulse repetition frequency from 10 MHz to 100 GHz
- Polarization maintaining available
- Choice between turn key easy to use benchtop or compact OEM module

## What applications

- High peak power generation
- Non-linear optics
- High speed transmission systems
- Super-continuum and pulse compression



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Optical Specifications @ 25 °C	PEFA-SP-C
Mode of operation	Pulsed
Optical pulse length	0.3 to 10 ps
Operating wavelength	1535-1565 nm
Peak power	up 1 kW for pulse distortion free
Average input power	-15 to +5 dBm
Saturated output power (0 dBm input in CW)	From 15 to 33 dBm
Pulse repetition frequency	10 MHz to 100 GHz
Dispersion	< 35 fs/nm
Polarization	Random or Linear
Control mode	ACC
Input/output termination	FC/APC, SC/APC, FC/SPC, SC/SPC, E2PS, C1

The PEFA-S-PC is available as turn-key benchtop or as OEM module.

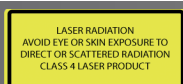
## RELIABILITY

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](mailto: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](http://www.lumibird.com) to connect with any of our global sites.

