

CEFA-L-HG SERIES

CW ERBIUM FIBER AMPLIFIER L-BAND HIGH GAIN



KEY FEATURES

- High sensitivity with very low input power (-40 dBm)
- High signal gain up to 50 dB
- Optical bandwidth from 1570 to 1607 nm
- Near quantum-limited noise figure
- Polarization-maintaining (optional)
- Choice between turnkey benchtop or OEM module

APPLICATIONS



- High sensitivity optical preamplification
- Quantum cryptography
- Optical metrology
- Optical remote sensing
- Test and measurement

Description

The Keopsys CEFA-L-HG is the only Erbium doped fiber amplifier designed to amplify very weak optical signals from 1570 to 1607 nm.

With an unrivalled design the amplified spontaneous emission is limited in profit to the output signal-to-noise ratio. A near quantum limited noise figure and a signal gain greater than 50 dB are achieved at low input power (-40 dBm).

Polarization-maintaining alignment to the slow fiber axis is available with very high polarization extinction ratio.

These amplifiers are offered as turnkey benchtop instruments or as modules. Applications like optical metrology or quantum cryptography are easily achieved with the CEFA-L-HG fiber amplifier.

Crédit photo plateforme B130 : Wyecs Prod

2 Platforms

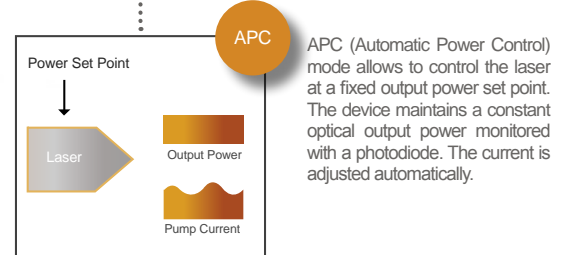
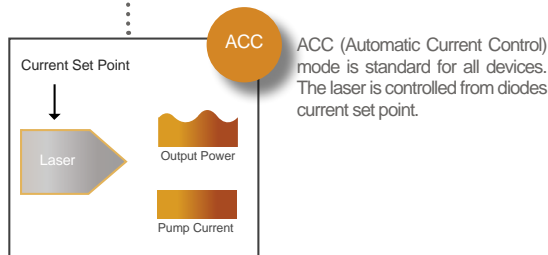
B130

M310



Modes of operation

The devices offer several modes of operation :



CEFA-L-HG SERIES

CW ERBIUM FIBER AMPLIFIER C-BAND GAIN FLATTENED LOW POWER

V3.1

Optical Specifications @ 25 °C	CEFA-L-HG	
Mode of operation	CW	
Polarization	Random (SM) or linear (PM with PER>20 dB)	
Saturated output power (-6 dBm input)	20 dBm	23 dBm
Wavelength range	1570-1607 nm	1571-1603 nm
Input power range*	-40 dBm to 0 dBm	
Small signal gain (-40 dBm input)	>40 dB	>50 dB
Noise figure (-40 dBm, 1595 nm input)	< 4.5 dB for SM, < 5.5 dB for PM	
Control mode	ACC, APC	
APC Tunability	30 to 100 %	
Input / Output termination	FC/APC, SC/APC, FC/UPC, SC/UPC	

The CEFA-L-HG series amplifiers are available as benchtop or as OEM module.

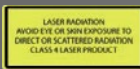
RELIABILITY

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.

For ordering information and custom solutions, please contact us.



Keopsys 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.