



nLIGHT's CWFL | 100W delivers a highly robust and efficient industrial system for a variety of industrial applications. The air-cooled design delivers a near-diffraction limited beam with WPE up to 25%. The system may be operated in QCW mode as well with modulation frequencies up to 50 kHz.

The CWFL platform integrates the best of nLIGHT's industry-leading technologies to deliver a highly effective, medium power fiber laser solution:

- Powered by Pearl™ single-emitter diode laser modules, which set the standard of excellence in high-performance, high-reliability diode lasers
- Leveraging Liekki™ fiber with proprietary Direct Nano-particle Deposition (DND) technology that provides high efficiency and minimizes photodarkening

## Features

- Power up to 100W
- WPE up to 25%
- *Powered by Pearl™* SE diode laser engine
- Liekki™ DND fiber technology
- Simple, plug and play integration
- 19" rack mountable
- Air Cooled
- QCW Modulation frequency up to 50kHz

## Applications

- Cutting
- Welding
- Soldering and bonding
- Annealing
- Sintering
- Micro-machining
- Scientific Research

## Proven Performance

## Typical Device Performance

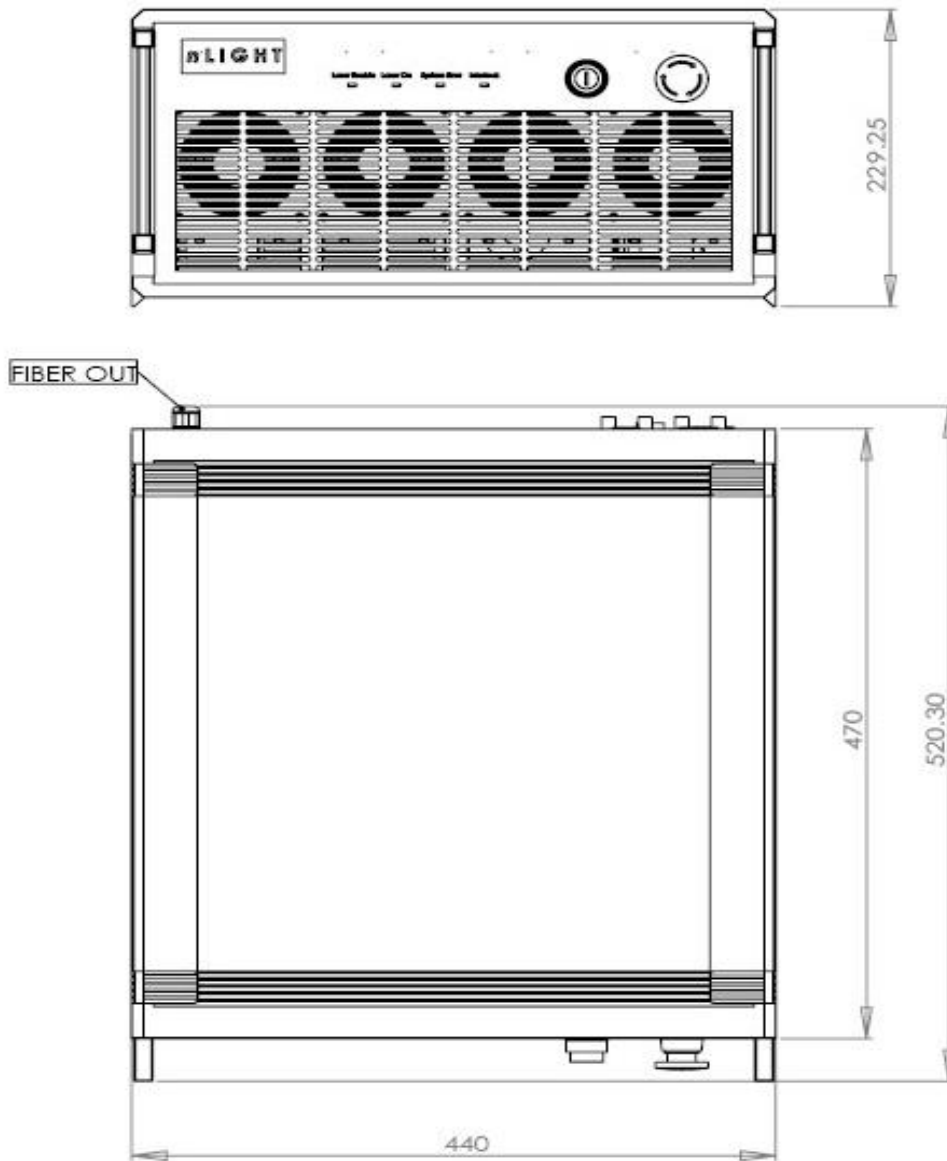
Optical		NL-CW-100-1085
Mode of operation		CW/QCW
Polarization		Random
Wavelength	nm	1085 $\pm$ 5
Emission line width (FWHM)	nm	<5
Nominal output power	W	100
Output power tuning	%	10-100
Output power stability*	%	<1
Beam Diameter	mm	5
Beam Quality, M <sup>2</sup>		<1.5
Electrical		
Operating voltage**	VAC	200-240
Operating voltage freq.	Hz	50-60
Power consumption (at 20°C)	W	600
Modulation Frequency Modes:		
Long Rise/Fall time mode (150 $\mu$ s)	kHz	0-5
Short Rise/Fall time mode (5 $\mu$ s)	kHz	0-50
Duty ratio	%	5-95
Mechanical		
Dimensions		5U
Output Collimator Dimensions***	mm	$\Phi$ 18X120
Output fiber length***	m	5
Minimum fiber cable bend radius	mm	>80
Weight	kg	35
Cooling method		Air
General condition		
Operating temperature	°C	+5 to +35
Storage temperature	°C	-20 to +60
Relative Humidity	%	5 to 95

\*Over 24 hour period.

\*\*110V Available upon request

\*\*\*May be customized

### Package Dimensions



**CFR Regulation**

These components do not comply with the federal regulation (Title 21 CFR, Chapter 1, Subchapter J) as administered by the Center for Device and radiological Health. Purchaser acknowledges that their products must comply with these regulations before they can be sold to an end-use.

Copyright © 2008 nLIGHT. All rights reserved.



**Notice**

nLIGHT continually improves its products to provide our customers with outstanding quality and reliability. nLIGHT may make changes to specifications and product descriptions at any time, without notice. In addition, nLIGHT offers a limited warranty to ensure customer satisfaction. For complete details, please contact your nLIGHT sales representative.