

LIEKKI[™] OE-Yb-L-30

30 W CW Fiber Laser Module/Optical Engine



LIEKKITM OE-Yb-L-30 optical engines are plug-and-play CW fiber laser modules for 20 to 30 W average output power laser applications. The optical engines are fully integrated fiber laser subassemblies with signal output and pump input fibers ready for splicing.

The efficiency and design gives the application designer the flexibility to create a wide range of powerful and easyto-use solutions.

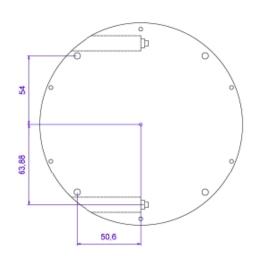
Applications

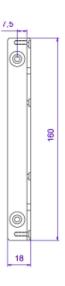
- Marking and engraving
- Micromachining
- Micro-adjustment
- High-resolution soldering
- Graphic art imaging

Features

- Complete optical engine modules with standard input and output fibers ready for splicing
- High optical efficiency with optimal beam and signal characteristics, minimal nonlinear effects
- Available in smaller footprint conductively cooled version
- Possibility to fit into customer supplied package
- Reliable design with medium power tolerance and very low photodarkening
- Compact, easy to mount with built-in heat sink function
- Lightweight and robust

Mechanical drawing





Dimensions are in MM. Material Aluminium.



HIGH-POWER SEMICONDUCTOR LASERS AND FIBERS

Typical device specification

Optical specifications

Rated output power 20 - 30 W

Central emission wavelength 1090 nm, +/- 2 nm

 $\begin{array}{lll} \mbox{Mode of operation} & \mbox{CW} \\ \mbox{Polarization} & \mbox{Random} \\ \mbox{Pump wavelength} & \mbox{920 nm} \\ \mbox{Emission bandwidth (FWHM)} & \mbox{0.2 nm} \\ \mbox{M}^2 & < 1.1 \end{array}$

Mechanical specifications

Complete package size Ø 160 x 33 mm

Body Ø 160 x 18 mm

Cooling element Ø 160 x 15 mm

Weight < 1100 g (air cooled)

< 1400 g (water cooled)

Cooling requirements Air or water cooling

Pump input/laser output fiber length 0.5 m typical

Environmental specifications

Operating temperature range +10 to +30°C
Operating humidy range 5 to 90% RH
Storage temperature range +0 to +70°C
Storage humidity range 5 to 90% RH

Input pump delivery options

12 x 105 μ m/125 μ m, NA = 0.15 12 x 105 μ m/125 μ m, NA = 0.22

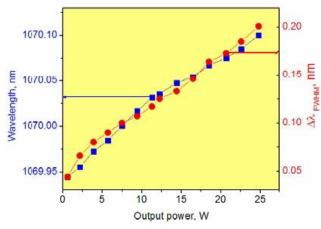
Output options

6/125 µm SMF pigtail

FC connector

Metal shielded cables

Typical performance data



Notice

nLIGHT continually improves its products to provide its 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.