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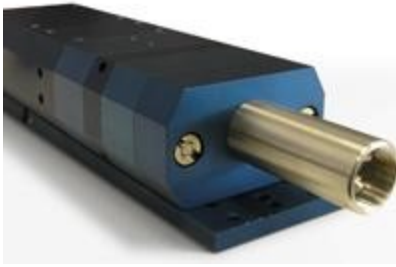
[CWA](#)

[CWA.L](#)

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[CWA.L.NB](#)

CWA.L.NB – Narrow Bandwidth DFB Diode Lasers



Narrow Bandwidth CW laser diode modules using DFB diode technology

Redphoton® CWA.L.NB Series – 760 nm – 1060 nm

Specifications CWA.L.NB-Models

Redphoton® CWA.L.NB

Wavelengths & Powers (other wavelengths and powers on request)	Single-Mode: 760nm / 40mW 763nm / 30mW 773nm / 75mW 780nm / 80mW 785nm / 80mW 852nm / 150mW 937nm / 100mW 976nm / 150mW 1060nm / 150mW
Beam diameter (other diameters on request)	1.25mm (1/e ²) +/- 0.25mm
Beam quality M ²	<1.2
Astigmatism (corrected)	<0.2*ZR
Beam ellipticity	<1.1:1
Optical bandwidth	<10 MHz (2 MHz typical)

Coherence length	>20 Meters
Polarisation	>100:1 vertical
Power stability	<0.5% / h
Noise 0Hz-100MHz	<0.5% peak<>peak
Modulation speed	Analog: 100Hz Digital: 10kHz
Supply voltage	24VDC, 2 Amp.
Features	Safety- interlock RS-232 Interface Remote-connector
Options	LDM.COL - collimator objective LDM.FOC - customized focussing objective LDM.AAC - Automatic Aging Compensation LDM.FASY.XXX - fibre coupling unit LDM.24VPSU - world wide power supply

The DFB diode lasers of the CWA.L.NB Series are highly-stable, temperature-stabilized diode lasers with extremely narrow spectral bandwidth of typically <2 MHz and <0.005 picometer and coherence lengths of up to 250 meters. As a result of their intelligent laser controller with interface RS-232, these lasers can be integrated seamlessly into applications and controller. Through the standardized Command Line Interface (CLI), you have at all times full control of all parameters of the laser, such as e.g. laser diode temperature, laser powers and currents, operating modes and lots more. The high-precision temperature stabilization to a maximum diode temperature variation of <0.02°K, and the stable power source for the laser diode, enable extreme power stability and very low noise levels. The systems consist of a laser head and a laser controller in the EMC-screened modular housing with supply voltage input 24 V DC, according to industrial standard. The integrated modulation inputs for analog power modulation with up to 1 kHz, and TTL modulation with up to 10 kHz, enable integration into control and measurement processes. As in case of all lasers of the Bluephoton® and Redphoton® series, the laser head can be very simply adapted to customer specifications by the use of the modular principle.

Press Releases

DFB lasers

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