Integrated Optics, UAB
Company code: 302833442
VAT No: LT100007179012
https://integratedoptics.com
info@integratedoptics.com

PART NUMBER 0488L-14A
ITEM NAME 488 NM LASER (DIODE; MM FIBER)

PRODUCT DATASHEET

DESCRIPTION

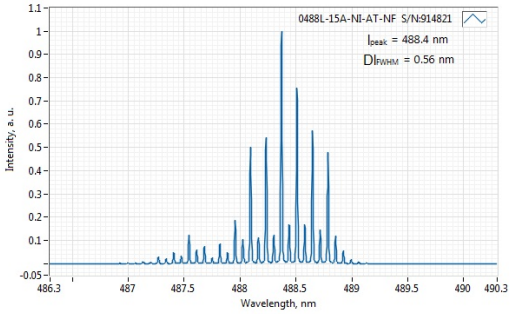
This is a 488 nm MM fiber coupled CW laser module. Covered in metal jacket this laser becomes a very robust and handy unit for a longtime use. Proprietary fiber coupling technology ensures good power stability and excellent fiber-coupling efficiency. FC/PC connector is provided as a standard option and the pigtail length is approx. 1 m. Other connector and fiber length options are available upon request.

SPECIFICATIONS

Last edited on: *24 January 2019*

Parameter	Minimum Value	Typical Value	Maximum Value
Central Wavelength, nm	485	488	491
Longitudinal modes	-	multiple	-
Spectral line width FWHM, nm	-	1	1.2
Output power, mW	-	30 [1]	-
Power stability, % (RMS, 8 hrs)	-	1 [2]	2
Power stability, % (peak-to-peak, 8 hrs)	-	2 [3]	3
Noise, % (RMS, 20 Hz to 20 MHz)	-	0.25 [4]	0.6
Transversal modes	-	Multiple	-
Control interface type	-	UART/USB	-
Operation mode	-	APC (CW)	-
Modulation bandwidth, MHz	-	optional [5]	-
Input voltage, VDC	4.8	5	5.3
External power supply requirement	-	+5 V DC, 1.5 A	-
Dimensions, mm	-	50 x 30 x 18 [6]	-
Fiber Length, m	0.95	1	1.1
Heat-sinking requirement, °C/W	-	1	-
Optimum heatsink temperature, °C	15	20	30
Warm up time, mins (cold start)	0.1	0.5	1
Temperature stabilization	-	Yes	-
Overheat protection	-	Yes	-
Storage temperature, °C (non-condensing)	-10	-	50
Net weight, kg	0.1	0.12	0.14
Max. power consumption, W	0.4	2	10

TYPICAL SPECTRUM



Typical spectrum of 0488 nm diode laser. Measured with 20 pm resolution.

Warranty, months (op. hrs)	-	14 (10000) [7]	-
RoHS	-	Yes	-
CE compliance	-	- General Product Safety Directive (GPSD) 2001/95/EC - (EMC) Directive 2004/108/EC	-
Laser Safety Class	-	3B	-
OEM lasers are not compliant with	-	IEC60825-1:2014 (compliant using additional accessories)	-
Country of origin	-	Lithuania	-

[1] The optical power can be tuned from virtually 0% to 100%. However, other specifications, such as central wavelength, power stability, noise, polarization ratio, beam shape, quality and circularity are not guaranteed at power levels other than factory preset power. Significantly worse power stability is to be expected at very low power levels, e.g. <3% from specified nominal power.
[2] Long term power test is carried out using an optical power meter with an input bandwidth of 10 Hz. Actual measurement rate has a period of about 20 seconds to 1 minute.
[3] Long term power test is carried out using an optical power meter with an input bandwidth of 10 Hz. Actual measurement rate has a period of about 20 seconds to 1 minute.
[4] Noise level is measured with a fast photodiode connected to an oscilloscope. The overall system bandwidth is from 2 kHz to 20 MHz.
[5] TTL digital modulation up to 10 MHz.
[6] Excluding control interface pins and an output window/fiber assembly.
[7] Whichever occurs first. The laser has an integrated operational hours counter.

Note: Product specifications are subject to change without prior notice to improve reliability, function or design or otherwise.