

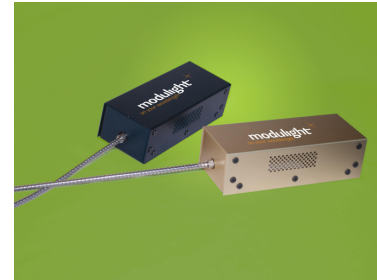
LimeLight

Single-emitter based laser systems

Overview

Modulight社のLimeLightは取扱が非常に簡単な シングルエミッターのレーザシステムです。ご用意している波長帯はブルーから近赤外まで計 8 種、465nm/635nm/650nm/808nm/1470nm/1550nm を取り揃えております。また、スタンダード製品は「SMA-905のファイバーアウトプット」、「ドライバー」、「冷却コントローラー」が組み込まれています。システムの操作はUSBポート介しPCからの操作、または「アナログ/デジタルシグナルでダイレクトにコントロールすることが可能です。

※OEMバージョン同様にパッケージのカスタマイズもリクエストに応じて可能です。



Applications

Defense	Industrial	Medical
Illumination Sensing	Optical pumping Measurement and analysis	Therapeutic procedures Diagnostics Dental

Electro-optical Parameters

Parameter	Symbol	ML2110	ML2012	ML2013	ML2014	ML2015	ML2016	Unit
Wavelength	λ	465	635	650	808	1470	1550	nm
Optical Output Power	P_{OPT}	1000	400	750	1500	700	500	mW
Input Current	I_{IN}	2.0...2.2	0.4...1	0.4...1	0.4...1	0.4...1	0.4...1	A
Input Voltage	V_{IN}	12	12	12	12	12	12	V _{DC}
Input Power	P_{IN}	<25	<10	<10	<12	<12	<12	W
Output Modulation	f	0(CW)...1	0(CW)...1	0(CW)...1	0(CW)...1	0(CW)...1	0(CW)...1	kHz
Minimum Pulse Width	τ_{min}	50	50	50	50	50	50	μ s
Power Stability	δP	1	1	1	1	1	1	%
Laser operating temperature	T_{OP}	20	20	20	25	20	20	°C

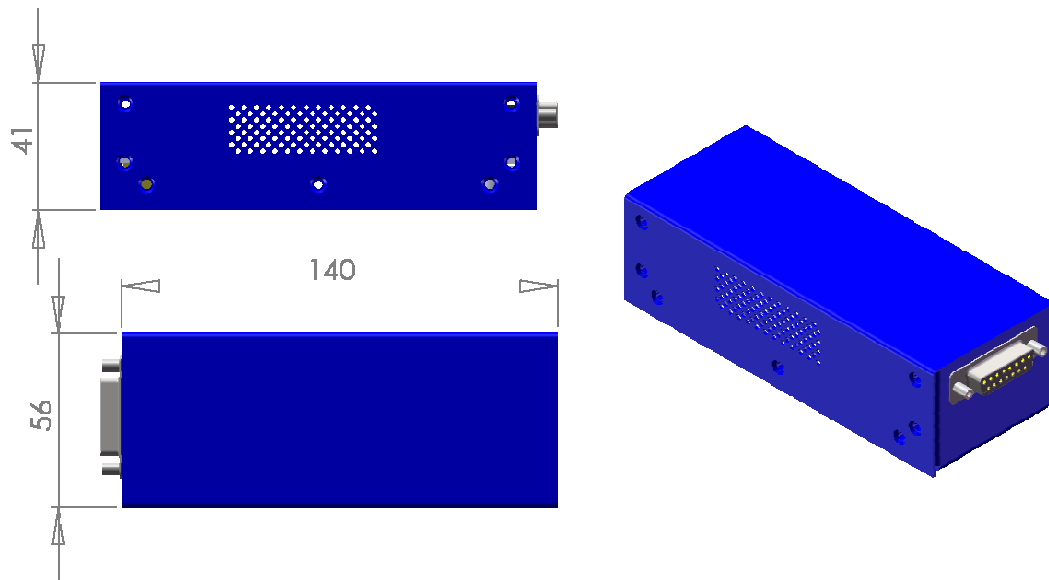
Fiber Pigtail Characteristics (standard, other options available)

Parameter	Symbol	Typical Value	Unit
Core Diameter	\varnothing_{CORE}	200	μ m
Cladding Diameter	\varnothing_{CLAD}	220	μ m
Coating Diameter	\varnothing_{COAT}	~500	μ m
Fiber Numerical Aperture	NA	0.22	-
Minimum Bending Radius (short-term)	R_{MIN1}	22	mm
Minimum Bending Radius (long-term)	R_{MIN2}	44	mm
Fiber Core Material		Pure silica	
Fiber Cladding Material		Fluorine doped silica	
Fiber Coating Material		Acrylate	
Connector at the fiber end		SMA-905 or receptacle type for SMA-905	

Version: 1.3 · Page 1

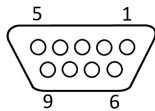


Package Information



Material used for the housing is anodized aluminum. Please consult factory for further details.

Pin Assignment (customizable, below can be used as a reference)



Pin Number	Assignment	Pin Number	Assignment
1	+12V input	6	External modulation (0/+5V)
2	GND	7	External modulation (reference)
3	Laser temperature	8	External control for output power
4	Laser temperature	9	Internal / calibration
5	Enable signal / interlock		

Safety Information

- The laser light emitted from this laser device may be visible or invisible, depending on the laser selected. The laser light is harmful to the human eye. Avoid eye and skin exposure to the beam, both direct and reflected.
- Products are subject to the risks normally associated with sensitive electronic devices including static discharge, transients, and overload. Please ensure ESD protection prior to handling the products.
- These Modulight products are not intended for use in systems where product malfunction can reasonably be expected to result in personal injury.



Peak power and wavelength are for safety analysis only, not to present device performance.

Liability note

This document is sole property of Modulight, Inc. No part of this document may be copied without written acceptance of Modulight, Inc. All statements related to the products herein are believed to be reliable and accurate. However, the accuracy is not guaranteed and no responsibility is assumed for any inaccuracies or omissions. Modulight, Inc. reserves the right to make changes in the specifications at any time without prior notice.