

Turn-key system Modulight SparkLight

635 to 1550 nm

modulight
on your wavelength

OVERVIEW

SparkLight turnkey laser platform is Modulight's response to users in search of a ready-to-use laser system. Accommodating most lasers in Modulight's product lineup, the turnkey laser platform offers all auxiliary devices required to operate a high-performance semiconductor laser array: cooling, constant current/power driving, digital supervisory circuit and easy-to-use user interface.

The turnkey laser platform can be modified to power up a wide selection of lasers, from 635 nm to 1550 nm, with a broad choice of output powers, from 3 W to 50 W (laser specific). The platform is designed for reliable CW operation with optional low bandwidth modulation input. A SMA 905 connector ensures repeatable connection of



ELECTRO-OPTICAL CHARACTERISTICS

Parameter	Symbol	Typical value					Unit
Product code		ML1762	ML1822	ML1820	ML1839	ML1821	
Wavelength	λ	635	808	980	1470	1550	nm
Optical Output Power	P_{OPT}	3	50	35	12	12	W
Power stability (24 hours)		< 1	< 1	< 1	< 1	< 1	%
Pigtail fiber core diameter		400 – 800	400-800	400 – 800	400 – 800	400 – 800	μm
Pigtail fiber NA		0.22	0.22	0.22	0.22	0.22	-
Modulation bandwidth (optional)		10	10	10	10	10	KHz

All above values are typical for CW operation @ 15°C

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ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Rating	Unit
Relative Humidity	RH	95	%
Storage Temperature	T _{STG}	-20 - +50	°C
Operating Temperature Range	T _{OP}	0 - +35	°C
Input Voltage	V _{IN}	88 - 132 / 176 - 264 *	VAC

*Selected by switch

PACKAGE INFORMATION

SparkLight turnkey platform is offered as three different versions: OEM system, rack mounted for industrial applications, and a desktop case with easy-to-use interface for research and industrial application development. More specific package information is available per request.

SAFETY INFORMATION

- The laser light emitted from this laser diode is invisible and may be harmful to the human eye. Avoid eye 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.

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