

MLT1-PL-R-OEM45 MLT1-PL-P-OEM45 Series

KeyFeatures

High energy (up to 150μJ)
PM version available up to 100μJ
Wide range of fixed pulse duration available from 500ps to 1.25μs
Excellent beam quality ($M^2 < 1.1$)
Burst mode
Adjustable pulse width on few ns
Monitor output
Internal or external TTL or LVDS trigger
Maintenance free operation
Highly reliable laser diode pumps
Compact & rugged design
Low power consumption
Custom versions available

Applications

LIDAR
Target ID
Mapping
Telemetry
3D scanning
Range finding
Topography scanning
Weather and pollutant detection
OPO pumping
YOUR APPLICATION

For moreInfo

Please contact us at:
North America: **514.748.4848**
888.922.1044
Europe & Asia: **+33 (0) 2 96 04 20 00**
or via e-mail at sales@3spgroup.com

LUSKENN1 Product Line 1.0μm Compact Pulsed Fiber Laser

The LUSKENN1 is a compact high power pulsed fiber laser at 1.0μm providing short pulse duration through a near diffraction limited randomly polarized beam. The MLT1- PL-R-OEM45 is optimised for LIDAR, telemetry or range finding application. The design and configuration of this laser render it unique and reliable.

Our patented “Injection Technology” allows the use of highly reliable broad area laser diode pumps, for a cost-effective and maintenance-free operation. The all-fibre design guarantees the robustness of the system, without any optical parts to align or to stabilise. The LUSKENN1 is an open platform for your specific requirements : adjustable pulse width on few ns, internal or external LVDS or TTL trigger, monitor output for synchronization, burst mode for pulse monitoring.

The simple integration of the OEM system requires no after-installation service. Power consumption is reduced to the minimum with extended operation temperatures. Obviously, custom configurations are possible, such as polarization maintaining version (MLT1-PL-P-OEM45 series).



LUSKENN1 Product Line

1.0µm Compact
Pulsed Fiber Laser



MLT1-PL-R-OEM45 Series

SPECIFICATIONS* STANDARD CONFIGURATIONS

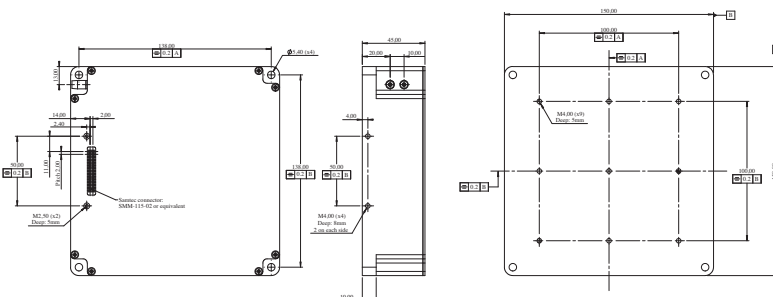
Parameter	Value	Unit	
Operation mode	Pulsed	-	
Seed laser wavelength	1064 typ.	nm	Other wavelengths available
Average output power	up to 10	W	
Pulse duration	from 0.5 to 1250	ns	Fixed duration in the range
Pulse repetition frequency	from 5 to 2000	kHz	in a limited range depending on pulse width and ASE
Output pulse energy	≤ 150	µJ	
Peak power	up to 17	kW	
Output power tunability	1 – 100	%	
Long term stability (RMS, over 1h@25°C)	<+/- 1	%	
Polarization	Random	-	PM optional
Output fibre length	typ. 50	cm	
Output fibre termination	Collimated beam	-	
Laser linewidth (FWHM)	<0.2	nm	for small pulse width
	<0.4	nm	for larger pulse
Typical beam diameter @1/e ²	2,4	mm	
Beam quality M ²	<1.5	-	
Dimensions	150 x 150 x 45	mm ³	
Weight	1200	g	
Operation Temperature	0 to +50	°C	-35 to +65 optional
Control mode	Continuous operation or burst	-	
Connector	SAMTEC SMM-115-02-SD-30		
Operating voltage DC	5 to 36	V	
Typ. power consumption (nom. power @ 25°C)	<150	W	

Ordering Information:
MLT1-PL-R-OEM45-xx-yy-zz
MLT1-PL-P-OEM45-xx-yy-zz
xx = pulse duration in ns
yy = pulse repetition frequency in kHz
zz = energy in µJ

Options:
- Adjustable pulse duration (few ns)
- Internal or external trigger
- TTL or LVDS trigger
- Collimated output
- Burst mode
- Monitor output
- Customised specs on request
- Extended warranty



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Please note: information in this document is typical and must be specifically confirmed in writing by your supplier before it becomes applicable to any order or contract. Information is subject to change without notice.

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ORDERING INFO

Please contact your Sales Manager. 3SPGroup can also develop custom products to meet a wide range of technical requirements.

3SPGroup
North America: 514.748.4848
888.922.1044

Europe and Asia: +33 (0) 2 96 04 20 00
www.3spgroup.com • sales@3spgroup.com