

MLT1-PL-R-OEM20 MLT1-PL-P-OEM20 Series

KeyFeatures

- High energy (up to 50μJ)
- PM version available
- 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
- YOUR APPLICATION

For moreInfo

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MENTAD1 Product Line 1.0μm Compact Pulsed Fiber Laser Transmitter

The MENTAD1 serie is the 1μm version of the MENTAD and MENTAD+ series with an average power up to 1W in a very compact unit (108 x 70 x 20 mm³ only). Energy per pulse can reach 50μJ with a maximum peak power of 1kW.

This laser can support polarization maintaining components (MLT1-PL-P-OEM20 series). The MLT1-PL-R-OEM20 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.

As for the MENTAD at 1.5μm, the MENTAD1 is an open platform for your specific requirements : internal or external LVDS or TTL trigger, monitor output for synchronization, burst mode for pulse monitoring, adjustable pulse width duration on few ns. The simple integration of the OEM system requires no after-installation service. Power consumption is reduced to the minimum with extended operation temperatures.



MENTAD1 Product Line

1.0µm Compact Pulsed Fiber
Laser Transmitter



MLT1-PL-R-OEM20
MLT1-PL-P-OEM20
Series

SPECIFICATIONS* STANDARD CONFIGURATIONS

Parameter	Value	Unit	
Operation mode	Pulsed	-	
Seed laser wavelength	1064 typ.	nm	Other wavelengths available
Average output power	up to 1	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	≤ 50	µJ	
Peak power	up to 1	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	FC/APC or Collimated beam	-	
Laser linewidth (FWHM)	<0.2 <0.4	nm nm	for small pulse width for larger pulse
Typical beam diameter @1/e ²	2,4	mm	
Beam quality M ²	<1.1	-	
Dimensions	108 x 70 x 20	mm ³	
Weight	200	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	V	
Typ. power consumption (nom. power @ 25°C)	<30	W	

Ordering Information:
MLT1-PL-*-OEM20-xx-yy-zz

*: R for Random and P for Polarized

Polarized

xx = pulse duration in ns

yy = pulse repetition frequency in kHz

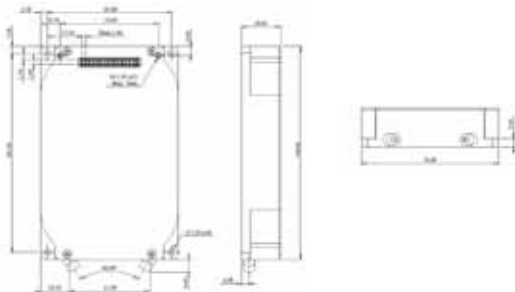
zz = energy in µJ

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.

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