

MLT-PL-R-OEM20 Series MLT-PL-P-OEM20 Series Series

KeyFeatures

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|---|
| High energy up to 100μJ |
| PM version available up to 50μJ |
| Wide range of fixed pulse duration available from 500ps to 1.25μs |
| Excellent beam quality ($M^2 < 1.1$) |
| Adjustable pulse duration on few ns |
| Burst mode |
| Monitor output |
| Internal or external TTL or LVDS trigger |
| Maintenance free operation |
| Highly reliable laser diode pumps |
| Compact & rugged design |
| Very low power consumption |
| Air cooled |
| 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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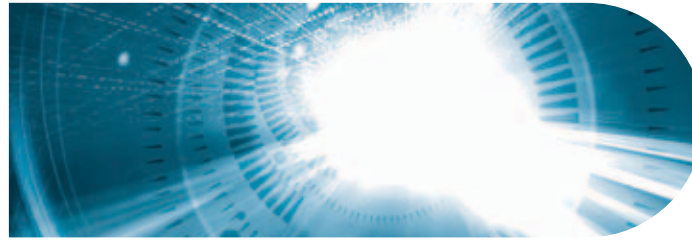
MENTAD+ Product Line 1.5μm Compact Pulsed Fiber Laser Transmitter

The MENTAD+ serie is an extension of the MENTAD serie where average output power has been pushed from 1.2W to 2.5W in a very compact unit (108 x 70 x 20 mm³ only). The consequence of this change is in the energy per pulse (up to 100μJ) and this laser can support larger polarization maintaining components (energy up to 50μJ in PM version). The MLT-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, the MENTAD+ 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. Obviously, custom configurations are possible, such as polarization maintaining device (MLT-PL-P-OEM20 series)



MENTAD+ Product Line

1.5µm Compact Pulsed Fiber
Laser Transmitter



MLT-PL-R-OEM20 Series MLT-PL-P-OEM20 Series Series

SPECIFICATIONS* STANDARD CONFIGURATIONS

| Parameter | Value | Unit | |
|--|-------------------------------|-----------------|---|
| Operation mode | Pulsed | - | |
| Seed laser wavelength | 1550 typ. | nm | Other wavelengths available |
| Average output power | up to 2500 | mW | |
| 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 | ≤ 100 | µJ | ≤ 50 for PM version |
| 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 | FC/APC or Collimated beam | - | |
| Laser linewidth (FWHM) | <0.2 | nm | 0.15 nm typical |
| Typical beam diameter @1/e ² | 2,4 | mm | for collimator |
| 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) | <25 | W | |

Ordering Information:

MLT-PL-^{*}-OEM20-xx-yy-zz
xx = pulse duration in ns
yy = pulse repetition frequency in kHz
zz = energy in µJ

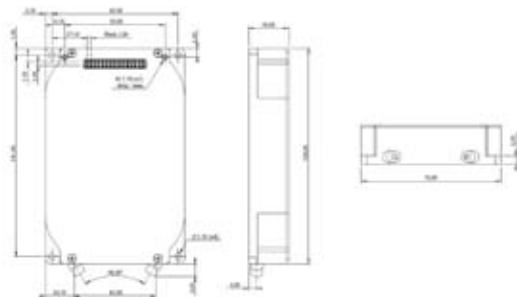
Options:

- 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

The 3SPGroup Fibre lasers emit both invisible Class IV and visible Class II radiations. Direct and scattered radiation can be harmful to the human eye. Proper laser safety eyewear must be worn during operation. Information in this document is subject to change without notice.

Operating and safety considerations
3SPGroup Fibre lasers comply with CE, FDA & RoHS. All 3SPGroup Fibre Lasers are patent pending.

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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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