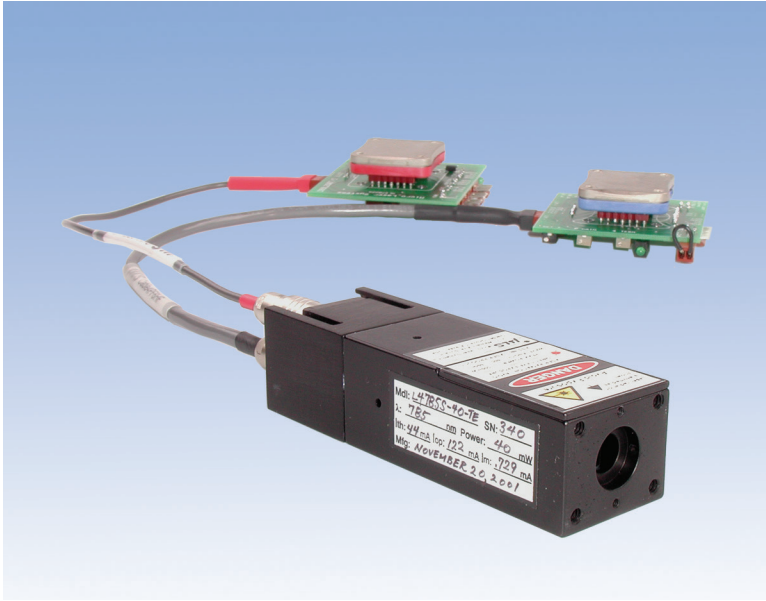


Lepton IV OEM Series Diffraction Limited



Features

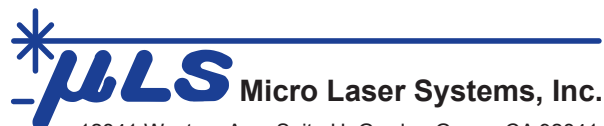
- 375nm to 1550nm
- Circular Gaussian profile
- Narrow linewidths
- Very high stability
- Variable output power
- TE cooled for high stability
- Full range of accessories
- Low power requirements

The Lepton IV Series of lasers are designed to give diffraction limited output with narrow linewidth and very high stability. They are a very affordable alternative to gas or solid state lasers. A nice benefit is they operate at low voltages, are very compact and last a long time.

Output power can be adjusted from zero to full output using the potentiometer or an external voltage. Temperature can also be adjust slightly to tune the wavelength a little with a pot or external voltage. Monitoring pins can monitor the laser current, photodiode current, set temperature and actual temperature. An enable pin can be used to turn on/off the laser and temperature controller but still leave the main power on. Laser housing has ample mounting holes

Accessories include beam expanders, focusing optics, filters, waveplates, polarizers, etc. that can be integrated into the body.

These lasers have been used in NIR spectroscopy, interferometry, ophthalmology, confocal microscopes, Raman spectroscopy, fluorescence excitation, optical tweezers, cytology, plasmonics, material analysis, photoplotting, probing, particle analysis, high resolution scanning and critical alignment.



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Lepton IV OEM Series

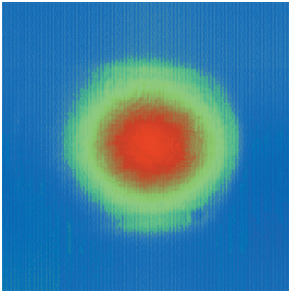
Specifications

Beam diameter:	3-4mm or 1-2mm
Beam divergence:	<0.7mrad
Pointing stability:	<20 mrad
Wavefront error:	<1/10 wave
Optical power:	Adjustable
Power stability (24 hours)	<1% total
Laser driver:	5-9 VDC, DL current plus 100mA
Laser TEC:	5 VDC, 2 amps
Operating temperature:	15 to 30°C
Storage temperature:	-10 to 60°C

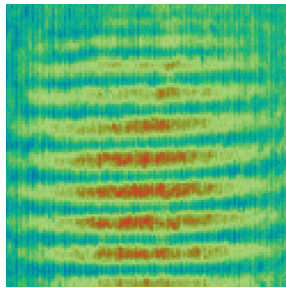
Available Wavelengths and Output Powers

Wavelengths	Power
375nm	56mW
395nm	100mW
405nm	20mW, 100mW, 240mW
415nm	100mW
420nm	100mW
445-450nm	40mW, 80mW
473nm	80mW
488nm	50mW, 150mW
515nm	64mW
520nm	40mW
635-638nm	6mW, 12mW, 25mW
640-642nm	48mW, 64mW, 120mW
660nm	70mW, 95mW
670nm	8mW
685nm	30mW
705nm	32mW
730nm	32mW
760nm	32mW
785nm	64mW, 95mW
808nm	120mW
830nm	40mW, 150mW
852nm	40mW, 64mW, 150mW
905nm	150mW
940nm	150mW
975-976nm	200mW
980nm	200mW
1060nm	115mW
1064nm	64mW, 150mW
1310nm	3mW
1550nm	3mW

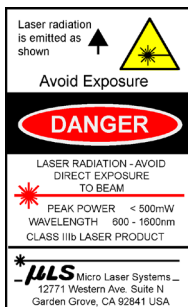
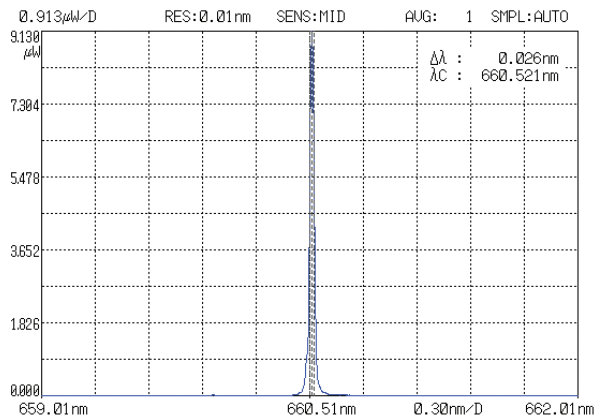
Typical Beam Profile



Typical Wavefront



Typical Spectrum for some lasers



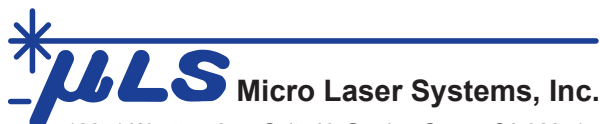
Labels are illustrated here to comply with 21 CFR 1040.10 as applicable under the radiations for health and safety act of 1986.

Most of the lasers are available without temperature control as well.

Some of the lasers have a built in grating resulting in no mode hops and much narrower linewidth than standard lasers. Some standard lasers also operate with no mode hops and narrow linewidth. These are only a sample of the many wavelengths available.

Optical elements can be integrated within the body of the laser such as filters, or attached to the laser to make focused beams, split beams or expanded beams. Please call for your particular requirements.

Specifications subject to change without notice.



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