

λmini

MINIATURIZED LASER MODULE
 COMPLETE WITH CONTROLLER AND USB POWER SUPPLY
 IN AN INCREDIBLY SMALL PACKAGE

KEY FEATURES:

- * Incredibly small yet fully featured
- * Output powers up to 75 mW
- * Powered via USB: no extra power adapter required
- * Control Software Ltunes included

It's the world's smallest complete laser module in an amazingly small design, the Lambda Mini includes not only the laser diode and precision collimating optics, but also the laser controller and power supply via USB. All you need for operating and controlling the laser is a simple USB cable connected to your computer. Its compact size makes the Lambda Mini a perfect choice as a precision light source for space-limited applications.

The laser module is available in two versions:

- the Lambda Mini Evo emits a free collimated TEM₀₀ laser beam
- the Lambda Mini Fiber couples the beam into an optical fiber



λmini EVO

The Lambda Mini Fiber includes an 80 cm single mode optical fiber with an FC-PC or FC-APC connector. The fiber is factory-aligned and permanently attached. Polarization-maintaining or multi-mode fibers are optionally available. Please contact our sales team for further information.

Wavelength nm	Maximum output power mW
405	15, 50
450	75
488	50
515	25
520	50
640	75
660	75
685	40
785	75
830	50

Wavelength nm	Maximum output power mW
400	30
405	15, 50
445	30, 50
460	50
488	30
520	30, 50
635	30, 50
660	50
670	50
705	15
730	15
785	50
820	50
830	50
905	50
940	50
1064	15
1310	10
1550	10

The actual emission wavelength may deviate from the specified wavelength by up to ± 5 nm (Lambda mini EVO)

The actual emission wavelength may deviate from the specified wavelength by up to ± 10 nm (Lambda mini FIBER)

Beam specifications for Lambda Mini EVO

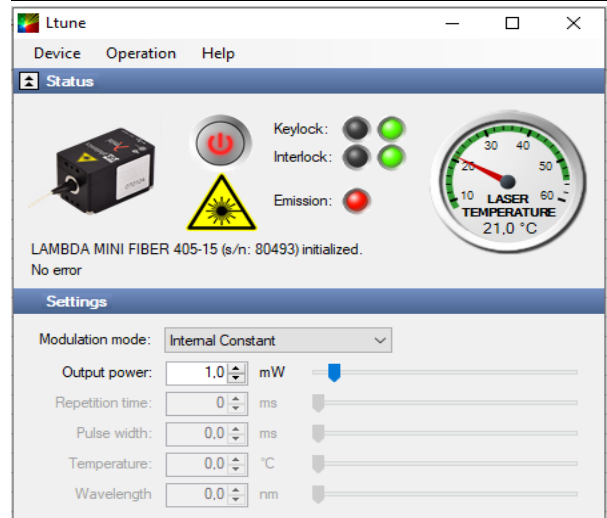
Beam diameter	1.1 x 2.2 to 1.2 x 2.8 (depending on wavelength)
Divergence	< 0.9 mrad
Spatial beam mode	TEM ₀₀
Polarization	linear, > 100:1 < 5mrad and < 0.1 mm (compared to base mount)
Beam alignment	
Pointing stability	< 5 μ rad/K



General specifications

Dimension	40.0 x 25.0 x 25.0 mm (technical drawing available)
Weight	41g
Warm-up time	5 sec
Noise	< 2% RMS
Power stability	< 2% (10h) under stable environmental conditions
Drive mode	active current control
CDRH classification	3b
Operating temp.	0°C to 45°C (non-condensing)
Storage temp.	-25°C to 70°C

Ltune control software



All operating parameters can be monitored and controlled from a PC using the Ltune laser control software for Windows. Alternatively, the laser can easily be controlled from your own application software. Please refer to the user manual for a detailed description of the communication protocol. You can find downloads on our website

Please contact us if your requirements are not matched by these specifications. Custom modifications are available for any quantities. All specifications are subject to change without notice. The latest versions can be found on our website.