



KEY FEATURES:

- Incredibly small yet fully featured
- Output powers up to 100 mW
- Powered via USB: no extra power adapter or cable required
- excellent value for money

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



Wavelength	Maximum output power
375 nm	50 mW
405 nm	15 mW, 50 mW
488 nm	75 mW
515 nm	25 mW
640 nm	75 mW
660 nm	75 mW
685 nm	40 mW
785 nm	75 mW
830 nm	45 mW

The actual emission wavelength may deviate from the specified wavelength by up to ± 5 nm.

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





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	Maximum output power
405 nm	15, 50, 100 mW
445 nm	30 mW
488 nm	20 mW
520 nm	30 mW
635 nm	30, 60 mW
660 nm	50 mW
785 nm	50 mW
808 nm	50 mW
830 nm	50 mW
1064 nm	50 mW
1310 nm	10 mW
1550 nm	10 mW

Beam specifications for Lambda Mini Evo

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



General specifications

Noise	< 2 % RMS
Power stability	< 2 % (10 h)
Warm-up time	5 sec
Drive mode	active current control
Control modes	constant power, controllable via USB
CDRH classification	3b
Dimensions	40.0 × 25.0 × 25.0 mm (technical drawing available on our website)
Weight	41 g
Operating temperature	0 °C to 45 °C (non-condensing)
Storage temperature	-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.

