

λmini

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:

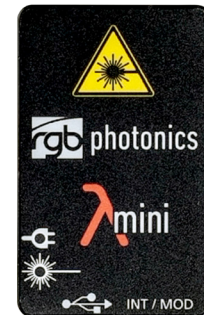
- the Lambda Mini Evo emits a free collimated TEM₀₀ laser beam
- the Lambda Mini Fiber couples the beam into an optical fiber

λmini EVO

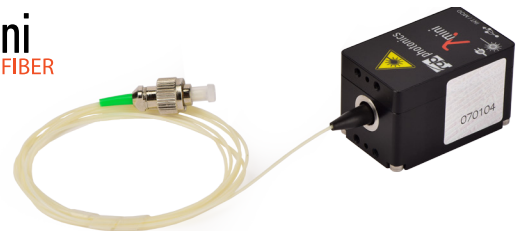
| Wavelength | Maximum output power |
|------------|----------------------|
| 375 nm | 50 mW |
| 405 nm | 15 mW, 50 mW |
| 488 nm | 75 mW |
| 515 nm | 25 mW |
| 640 nm | 75 mW |
| 660 nm | 75 mW |
| 685 nm | 40 mW |
| 785 nm | 75 mW |
| 830 nm | 45 mW |

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



λmini FIBER



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 |

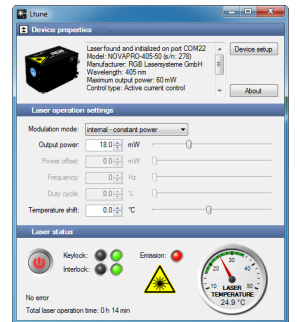


General specifications

| | |
|-----------------------|--|
| Noise | < 2 % RMS |
| Power stability | < 2 % (10 h) under stable environmental conditions |
| 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.



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

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