

iC-MINI-SM

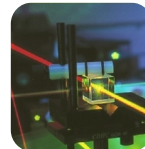
PL.iC-Mlxxx.yyy-SM



Compact laser diode module:

- Gaussian intensity profile
- Wavelengths 405 - 808 nm
- Integrated TEC
- Very compact industrial housing

Applications:



Particle analysis

Determination of particle size and shape in fluids.



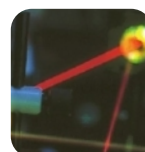
Fluorescence excitation

Excitation of chromophores and fluorophores.



Flow cytometry

Counting and sorting of different cell types.



Optogenetics

Activate and deactivate in-vivo cellular behaviour.

	iC-MINI-SM PL.iC-Mlxxx.yyy-SM
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OPTICAL							
Available wavelengths *	405 nm	450 nm	488 nm	520 nm	638 nm	785 nm	808 nm
Maximum output power	100 mW	70 mW	40 mW	70 mW	150 mW	60 mW	350 mW
Beam profile	Singlemode (TEM ₀₀)						
Beam size (1/e ²)	< 2.5 x 3.5 mm (elliptical)						
Divergence (full angle)	< 1.0 mrad						
Power stability	< +/- 1 % (over 8 h)						
Polarisation ratio	>50:1						
ELECTRICAL							
Integrated TEC	Yes						
NTC	10 kOhm at 25 °C						
MECHANICAL							
Dimension laser head	60 x 35 x 25 mm ³						
Weight laser head	90 g						
ENVIRONMENTAL							
Cooling	via baseplate (must be attached to external heat sink)						
Operating temperature	10 - 35 °C						
Warm-up time	< 5 min						
Laser class (EN 60825-1)	3B						

* Others on request

Ordering code

PL.iC-MI **xxx**. **yyy**-SM

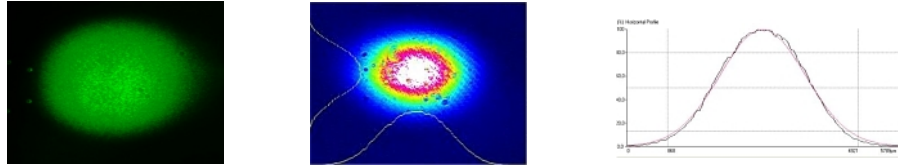
Output power

Wavelength

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Beam profile

The elliptical beam of the PEGASUS iC-MINI-SM has a Gaussian intensity distribution. This makes the MINI-SM an ideal laser source for fluorescence excitation applications with focused laser spots.



Typical beam profile for circularized 520 nm beam.

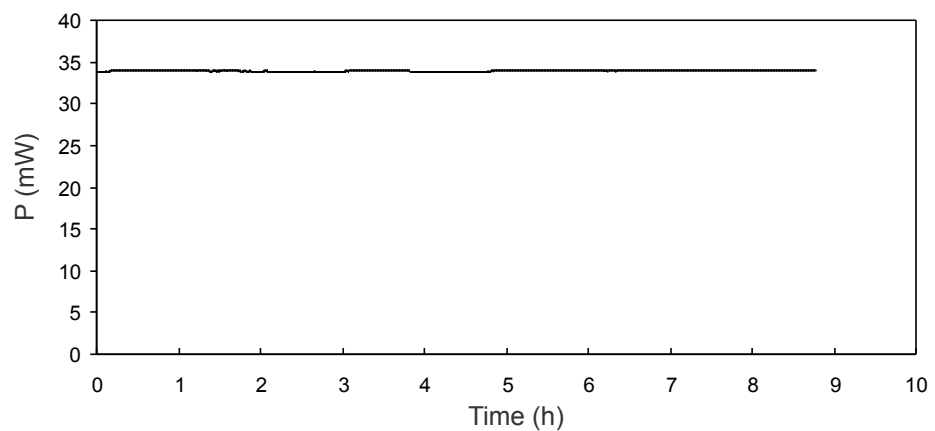
Power stability

Special fixation technology ensures highly reliable and hands-free operation. The integrated TEC guarantees a constant output performance, even for changing environment temperatures.

Constant LD temperature of 25°C ensures a superior lifetime. The laser maintains a power stability typ. < +/- 1 % over 8 h.

Typical output power stability over 8 h (after warm-up) *

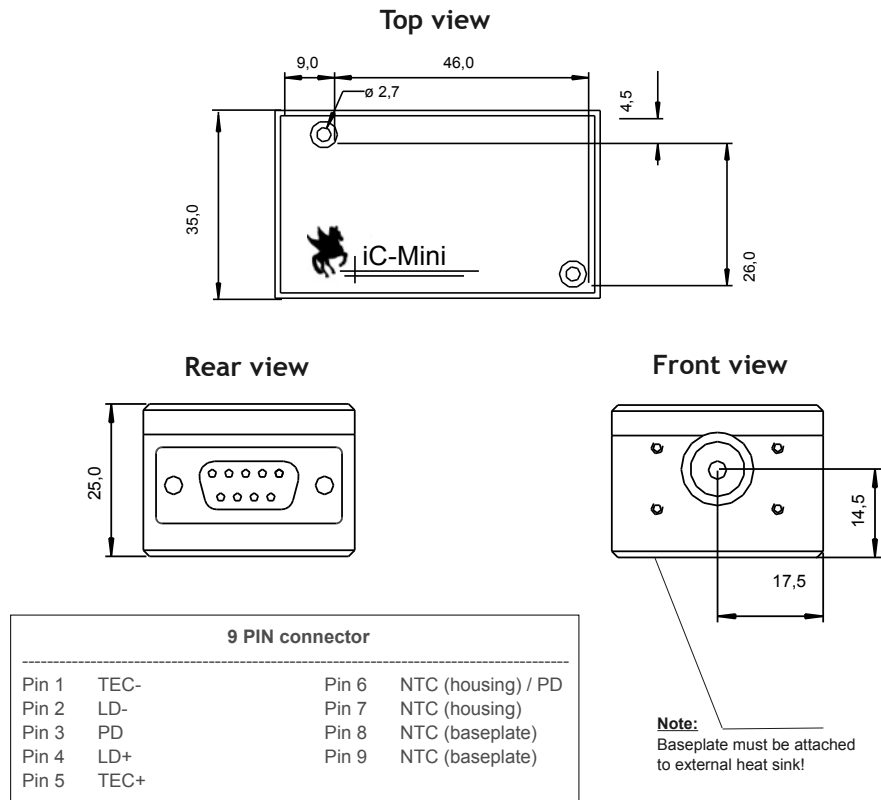
PL.iC-Ml.520.25-SM - 520 nm / 25 mW



* Performed with PEGASUS benchtop driver PL.230V.-2A-1C1T

iC-MINI-SM PL.iC-Mlxxx.yyy-SM

Mechanical dimensions



Adapted driver solutions

OEM version

PL.LD.12V-2A-1C1T
12 VDC power supply



Benchtop version

PL.LD.230-2A-1C1T
230 VAC power supply



PEGASUS follows a policy of continuous product improvement and reserves the right to change any specifications without notice.

All products comply the warranty of 1 year. (2 years on request.)



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