

M² online, M² within high accuracy $\pm 3 \%$

ML4515 M² meter is developed for measuring the beam quality parameter M² for CW and pulsed laser beams.

It uses a high resolution digital camera for precise determination of the laser beam diameter.

A new M² module of our beamlux II advanced software package evaluates the M² value with a precision of $\pm 3\%$. ML 4515 is pre-adjusted and easy to align.

The high measuring rate of $> 5\text{ Hz}$ allows online testing, adjustment and optimization of your laser.

Complete beam analysing software

- M² measuring of single pulses
- ML1203 advanced with additional M² module
- averaging of frames for high accuracy
- background correction
- M²_x, M²_y
- evaluation of beam diameter in compliance to ISO
- automatic and manual mode
- visualisation of the caustic

Accessories

- beam alignment tool, attenuators (optional)
- trigger diode for synchronization

Specifications:

Wavelength	350-1100 nm (optional UV)
Laser beam diameter	< 6 mm (15 mm with additional optics)
max. Power density	< 1 W/cm ² (< 10000 W/cm ² with additional attenuators)
max. Energy density	< 300 µJ/cm ² (< 1 J/cm ² with additional attenuators)
M ²	1 - 30
Accuracy	$\pm 3 \%$ (@ M ² = 1.1)
Single pulse detection	ca. 1000Hz (VIS)
Measuring Rate	ca. < 1/5 s after adjustment M ² measuring of single pulses
Dimensions	ca. 310 x 210 x 115 mm ³
Weight	ca. 5.7 kg



New squarelux

Complete Beam Analysis for
CW - and pulsed Laser beams

M² - meter