

BEAMAGE-M2

Automated M^2 Measurement System

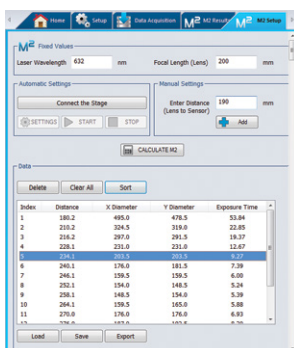
NEW



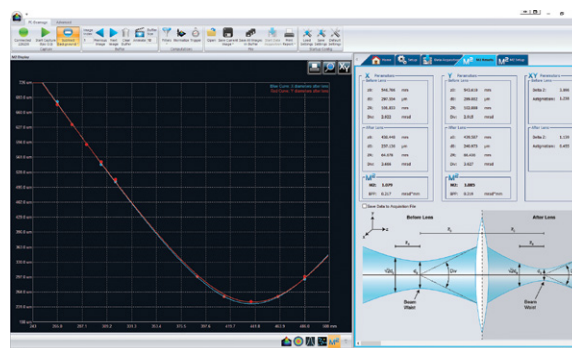
KEY FEATURES

- 1. LARGE APERTURES**
The only M^2 system on the market equipped with a complete set of 50mm (2") optics. Also, the sensor is 11.3 x 11.3mm
- 2. SIMPLE ALIGNMENT**
Two beam-steering mirrors are included for quick and easy alignment of your laser into the system. The internal mirrors are factory-aligned and the pre-set height also simplify the alignment
- 3. COMPACT**
The low-profile ingenious mechanics make it easy to fit the device on any optical table
- 4. ISO COMPLIANT**
The calculations are fully compliant to the ISO 11146 and 13694 standards
- 5. FAST ACQUISITION**
Make a complete, ISO-compliant measurement in only 20 seconds with the ROI feature and in less than a minute with full-frame acquisition
- 6. FLEXIBLE & INTUITIVE SOFTWARE**
In the easy-to-navigate software, both automatic and manual settings are available, so data points can be added or removed even after an automatic scan is completed

USER INTERFACE



Enter measurement parameters in the M^2 Setup tab.



View and save results with the comprehensive M^2 Results tab.

SEE ALSO

- ACCESSORIES FOR BEAM DIAGNOSTICS **188**
LIST OF REGULAR ACCESSORIES **194**

BEAMAGE-M2



SPECIFICATIONS

NEW

BEAMAGE-M2*

SENSOR TECHNOLOGY Beamage-4M included

EFFECTIVE APERTURE Ø 48 mm optics
11.3 x 11.3 mm sensor

MEASUREMENT CAPABILITY

System Wavelength Range	350 - 1100 nm
Attenuation Range	3 Flip-mount attenuators for 8 levels of attenuation: no attenuation, ND0.5, ND1, ND2, ND1.5, ND2.5, ND3, ND3.5
Beam Diameter Range ^a	55 µm to 11.3/3 mm
Translation Stage	
Mechanical Travel Range	200 mm
Effective Optical Path Range	400 mm
Lens Focal Length	3 AR-coated lenses included: 200 mm, 250 mm and 300 mm
Typical M ² Accuracy ^b	±5%
Typical M ² Repeatability ^b	±2%
Applicable Light Sources	CW and pulsed
Typical Measurement Time	45 sec with full-frame acquisition

DAMAGE THRESHOLDS ^c

Maximum Average Power	1 W with ND filter
Maximum Density (1064 nm)	CW: 10 W/cm ² ; Pulsed: 300 µJ/cm ²

PHYSICAL CHARACTERISTICS

Dimensions	
Main Enclosure	357 mm (L) x 165 mm (W) x 135 mm (H)
Total (including external mirrors)	602 mm (L) x 193 mm (W) x 172 mm (H)
Optical Axis Height	86 mm
Weight	6.6 kg
Power Supply	48V DC, 1.25A out

SOFTWARE

Displays	2D, 3D, XY, Beam Tracking and M ²
Beam Diameter Definitions	D4σ 1/e ² along crosshairs (13.5%) FWHM along crosshairs (50%) Custom (%)
Beam Quality Definitions	Laser beam quality M ² : M ² _x , M ² _y (ISO compliant) Beam Propagation Factor: BPP _x , BPP _y Width at waist: W _x , W _y Waist location and offset: Z _x , Z _y , ΔZ Divergence angle: θ _x , θ _y Rayleigh length: Z _{Rx} , Z _{Ry} Astigmatism
Printing and Reports	Full report in print-ready format

ORDERING INFORMATION

Product Name	Beamage-M2
Product Number	Call

Specifications are subject to change without notice

* Available in March 2018

Specifications in the table above are for the use with a Beamage-4M beam profiler (included in the Beamage-M2 kit)

- a. At the Beamage sensor
- b. Depending on the beam quality and optical configuration
- c. With ND4 filter at the Beamage