

## Edmund Optics Beam Profiler 4M



Edmund Optics Beam Profiler 4M, #11-045

Stock **#11-045** **5 In Stock**

⊖ 1 ⊕ **A\$10,320<sup>00</sup>**

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### Product Downloads

### General

**Filters Included :**  
Neutral Density, OD 4.0 (x1)

**Input Beam Requirements:**  
Minimum 55µm (10 x 10 pixels)

**Software:**  
USB Included

### Physical & Mechanical Properties

**Dimensions (mm):**

61 x 81.1 x 19.7

**Weight (g):**

138 g

**Dimensional Accuracy:**

Contact us

## Optical Properties

**Beam Diameter, 1/e<sup>2</sup> (mm):**

55um - 11mm

**Wavelength Range (nm):**

350 - 1150

**Spectral Range:**

350 to 1150 nm

**CW Saturation:**

10 W/cm<sup>2</sup> (at 1064 nm with ND4 filter)

**Pulsed Saturation:**

0.03 mJ/cm<sup>2</sup> without ND filters. 0.1 J/cm<sup>2</sup> with filter

**Peak Intensity:**

Auto adjusted to 85% of camera saturation level

**Damage Threshold, By Design:**

0.1 J/cm<sup>2</sup> @ 1064 with ND4 filter

**Minimum Stimulation, Pulsed:**

External trigger recommended for repetition rates below 250 Hz

**Beam Diameter (µm):**

55um - 11mm

## Sensor

**Frame Rate (fps):**

6.20 (at full frame)

**Pixel Size, H x V (µm):**

5.5 x 5.5

**Pixels (H x V):**

2048 x 2048 (4.2 MegaPixel)

**Sensing Area, H x V (mm):**

11.3 x 11.3

**Gamma:**

N/A

**Sensor Format:**

1"

**Frame Rate:**

6.2 Hz 4.2 MPixel (Full frame), 32 Hz 0.066 Mpixel (256 x 256)

**Exposure Time:**

0.06 to 200 ms

## Electrical

**Signal to Noise S/N Ratio (dB):**

1000:1 (60 dB)

**Gain (dB):**

User Adjustable

**Peak Noise (nW/cm<sup>2</sup>):**

Contact us

**Pulse Trigger:**

1.1 to 24 V, rising edge

**Maximum Power (W):**

1 W with ND filter

## Hardware & Interface Connectivity

**Computer Interface:**

Displays: 2D, 3D, XY and Beam Tracking  
Dia. Definitions: D4σ, 1/e<sup>2</sup> (13.5%), FWHM (50%), 86% of the aperture, Buffer Controls: Open File, Save Current Data, Save All Data, Previous/Next Image, Clear, Animate, Report: 2D, 3D, XY, Measures and Parameters.  
Print screen tool in BMP (2D and 3D)

**Operating System:**

Windows

## Threading & Mounting

**Mount:**

1" x 32 TPI (C-Mount)

## Environmental & Durability Factors

**Operating Temperature (°C):**

18 to 28

## Regulatory Compliance

[Compliant](#) **RoHS 2015:**

[View](#) **Certificate of Conformance:**

[Compliant](#) **Reach 242:**

## Product Details

- High Resolution for Accurate Small Beam Profile Measurements
- Large Area Sensor for Large Beam Profiling
- USB 3.0 for the Fastest Transfer Rates

Edmund Optics® Beam Profilers are designed to measure a wide range of laser beam sizes, providing information to optimize laser system operation. These laser beam profilers feature high resolution and large area sensors to ensure accurate profiling of both small and large laser beams. Available in two sizes, beam profilers are threaded for 1" x 32 TPI mounting, making them compatible with C-Mount accessories. Edmund Optics Beam Profilers feature an external trigger to synchronize the camera with a pulsed laser as well as USB 2.0 and 3.0 compatibility for the industry's fastest transfer rates. Intuitive beam analysis software with multiple display options (2D, 3D, and XY), as well as many control tools such as a background subtraction function and Gaussian fit, is also included with each beam profiler.

**Note:** Software driver available for download. Products are compatible with LabVIEW.