

## BEAMAGE-4M

Beam profiling camera. 4.2 MPixel high-resolution CMOS sensor, ISO-compliant measurements.



### PRODUCT FAMILY KEY FEATURES

#### USB 3.0 FOR THE FASTEST TRANSFER RATES

Up to 10X faster than regular USB 2.0 connections (also USB 2.0 compatible)

#### HIGH RESOLUTION

For accurate profile measurements of very small beams: 5.5  $\mu\text{m}$  pixel pitch for the BEAMAGE-4M

#### LARGE APERTURES

- 11.3 x 11.3 mm for the BEAMAGE-4M and BEAMAGE-4M-IR
- 20.5 x 20.5 mm for the BEAMAGE-4M-FOCUS

#### AVAILABLE WITH IR COATING

The BEAMAGE-4M-IR cameras have a special phosphor coating for IR wavelengths (1495-1595 nm)

#### ISO COMPLIANT

D4 $\sigma$  definition of diameter, centroid, ellipticity and orientation are ISO 11146:2004 and 11146:2005 compliant

#### INTUITIVE SOFTWARE INTERFACE

Easy to navigate interface, with many display and control features:

- 2D, 3D and XY displays
- Background subtraction function
- Unique "animate" function
- Gaussian fit
- Semi-log graph

#### EXTERNAL TRIGGER

To synchronize the camera with a pulsed laser

#### SOFTWARE DEVELOPMENT KIT

A software development kit is available. Learn more about [BEAMAGE-SDK](#).

#### COMPATIBLE STAND

[STAND-D-233](#)

## SPECIFICATIONS

### MEASUREMENT CAPABILITIES

|                           |   |
|---------------------------|---|
| Spectral range            | 350 - 1150 nm   |
| Minimum measurable beam   | 55 $\mu\text{m}$  |
| Sensor technology         | CMOS  |
| Pixel count               | 4.2 MPixels   |
| H x V                     | 2048 x 2048   |
| Beam diameter definitions | D4 $\sigma$ (ISO compliant)<br>1/e <sup>2</sup> along crosshairs (13.5%)<br>FWHM along crosshairs (50%)<br>Custom (%) |
| Shutter type              | Global  |
| ADC level                 | 12 bit (default) / 10 bit (option)  |
| RMS noise                 | 1000:1 (60 dB)  |

### DAMAGE THRESHOLDS

|                                     |                        |
|-------------------------------------|------------------------|
| Maximum power density <sup>1</sup>  | 10 W/cm <sup>2</sup>   |
| Maximum energy density <sup>2</sup> | 100 mJ/cm <sup>2</sup> |
| Maximum power <sup>3</sup>          | 1 W                    |

1. At 1064 nm. With ND4 filter.
2. At 1064 nm, 10 ns. With ND4 filter.
3. At 1064 nm. With ND4 filter.

#### PHYSICAL CHARACTERISTICS

|                 |                        |
|-----------------|------------------------|
| Dimensions      | 61H x 81.1W x 19.7D mm |
| Weight          | 0.14 kg                |
| Pixel dimension | 5.5 $\mu$ m            |
| Included filter | ND4                    |
| Active area     | 11.3 x11.3 mm          |

#### ORDERING INFORMATION

|            |        |
|------------|--------|
| BEAMAGE-4M | 202880 |
|------------|--------|

Specifications are subject to change without notice. Refer to the user manual for complete specifications.

## INTERESTED IN THIS PRODUCT?

GET A QUOTE

Find your local sales representative at [gentec-eo.com/contact-us](http://gentec-eo.com/contact-us)