

BEAMAGE-4M

CMOS Beam Profiling Camera



PRELIMINARY SPECIFICATIONS

KEY FEATURES

- 1. USB 3.0 FOR THE FASTEST TRANSFER RATES**
Up to 10X faster than regular USB 2.0 connections (also USB 2.0 compatible)
- 2. HIGHEST RESOLUTION**
The 4.2 MPixels resolution gives accurate profile measurements of very small beams
- 3. OUR LARGEST SENSOR**
The 11.3 x 11.3 mm sensor allows to measure very large beams
- 4. ISO COMPLIANT**
D4 σ Definition of Diameter, Centroid, Ellipticity and Orientation are ISO 11146:2004 and 11146:2005 compliant
- 5. INTUITIVE SOFTWARE INTERFACE**
Easy to navigate interface, with many displays and control features:
 - 2D, 3D and XY Displays
 - Background Subtraction Function
 - Unique "Animate" Function
 - Gaussian Fit
 - Semi-Log Graph
- 6. EXTERNAL TRIGGER**
To synchronize the camera with a pulsed laser

AVAILABLE MODEL



Beamage-4M
(4.2MPixels CMOS Camera)

MAIN FUNCTIONS



Beam
Tracking



Filters



Divergence



Subtract
Background



Animate



Normalize



Image
Averaging



Trigger

ACCESSORIES



Stand with Delrin Post
(Model Number: 200428)



BDA-A-VAR, BDA-S-10-UV/IR
Beam Splitters and Attenuators



Stackable ND Filters
(0.5, 1.0, 2.0, 3.0, 4.0 & 5.0)



UV and IR Filters



UV Converters &
IR Adaptors



Pelican Carrying Case

SEE ALSO

ACCESSORIES FOR BEAM DIAGNOSTICS
LIST OF REGULAR ACCESSORIES

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APPLICATION NOTE

HOW TO CHOOSE A UV CONVERTER [202182](#)

BEAMAGE-4M

SPECIFICATIONS

	BEAMAGE-4M
SENSOR TECHNOLOGY	CMOS
EFFECTIVE APERTURE	11.3 x 11.3 mm
	BEAMAGE-4M
MEASUREMENT CAPABILITY	
Wavelength Range	
Camera only	350 - 1150 nm
With UG11-UV Filter	250 - 370 nm
With B3-IR-FILTER	1250 - 1350 nm
Pixel Count	4.2 MPixels
H x V	2048 x 2048
Pixel Dimension	5.5 x 5.5 μm
Minimum Measurable Beam	55 μm
Shutter Type	Global
Frame Rate	6.2 fps @ 4.2 MPixels (Full Frame) 11.4 fps @ 2.1 MPixels (2048 x 1024) 18.6 fps @ 1.1 MPixels (2048 x 544) 32 fps @ 0.066 MPixels (256 X 256)
RMS Noise	1000:1 (60 dB)
ADC Level (User Setable)	12 bit (default) / 10 bit (option)
DAMAGE THRESHOLDS ^a	
Maximum Average Power	1 W
Saturation Level (1064 nm)	CW: 10 W/cm ² ; Pulsed: 300 $\mu\text{J}/\text{cm}^2$
SOFTWARE	
Displays	2D, 3D, XY and Beam Tracking
Display Features	2D: Print Screen, Reset View, Show/Hide Beam Diameter 3D: Print Screen, Reset View, Top View XY: Save Data, Zoom, Gaussian Fit, Semi-Log, Show/Hide Cursor, Show/Hide FWHM, Show/Hide 1/e ² Beam Tracking: Save Data, Print Screen, Reset View, Zoom
Beam Diameter Definitions	D4 σ (ISO compliant) 1/e ² along crosshairs (13.5%) FWHM along crosshairs (50%) 86% effective diameter (D86)
Buffer Controls	Open File, Save Current Data, Save All Data, Previous/Next Image, Clear Buffer, Animate
Printing and Reports	Full Report in Print Ready Format (2D, 3D, XY, Measures, Parameters) Print Screen in BMP format (2D and 3D)
PHYSICAL CHARACTERISTICS	
Sensor Size	11.3 x 11.3 mm
Sensor Area	1.28 cm ²
Dimensions (not including filter)	61H x 81.1W x 19.7D mm
Weight (head only)	138 g
ORDERING INFORMATION	
Product Name	Beamage-4M
Product Number	202880

a. With ND4 filter

Specifications are subject to change without notice