

BEAMAGE

CMOS beam profiling cameras



KEY FEATURES

- > **USB 3.0 FOR THE FASTEST TRANSFER RATES**
Up to 10X faster than regular USB 2.0 connections
- > **HIGH RESOLUTION**
4.2 Mpixels resolution gives accurate profile measurements of very small beams
- > **LARGE APERTURES**
 - 11.3 x 11.3 mm for the Beamage-4M
 - 20.5 x 20.5 mm for the Beamage-4M-FOCUS
- > **AVAILABLE WITH IR COATING**
Beamage 4M-IR cameras have a special phosphor coating for IR wavelengths (1495-1595 nm)
- > **ISO COMPLIANT**
D4 definition of diameter, centroid, ellipticity and orientation are ISO 11146:2004 and 11146:2005 compliant
- > **EXTERNAL TRIGGER**
To synchronize the camera with a pulsed laser

INTUITIVE SOFTWARE INTERFACE

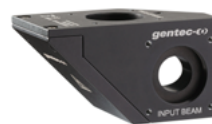
Easy to navigate interface, with many displays and control features:

- 2D, 3D and XY Displays
- Background Subtraction Function
- Unique "Animate" Function
- Gaussian Fit
- Semi-Log Graph

ACCESSORIES



Stand with delrin post



BA series optical attenuators



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



UV and IR filters



Pelican carrying case



Fiber adaptors & connectors (FC, ST and SMA)



UV converters & IR adaptors



	BEAMAGE-4M	BEAMAGE-4M-IR	BEAMAGE-4M-FOCUS
SENSOR TECHNOLOGY	CMOS	CMOS (with phosphor coating)	CMOS (with fiber optic taper)
EFFECTIVE APERTURE	11.3 x 11.3 mm	11.3 x 11.3 mm	20.5 X 20.5 mm ^a
MEASUREMENT CAPABILITY			
Wavelength range			
Camera only	350 - 1150 nm	1495 - 1595 nm	350 - 1150 nm
With UG11-UV filter	250 - 370 nm	---	---
With B3-IR-filter	1250 - 1350 nm	---	---
Pixel count	4.2 MPixels	4.2 MPixels	4.2 MPixels
H x V	2048 x 2048	2048 x 2048	2048 x 2048
Minimum measurable beam	55 μm	70 μm	120 μm
Frame rate		6.2 fps at 4.2 MPixels (Full Frame) 11.4 fps at 2.1 MPixels (2048 x 2048) 18.6 fps at 1.1 MPixels (2048 x 544) 32 fps at 0.066 MPixels (256 x 256)	
RMS noise	1000:1 (60 dB)	1000:1 (60 dB)	1000:1 (60 dB)
DAMAGE THRESHOLDS			
Maximum average power	1 W with ND filter	1 W with ND filter	1 W with ND filter
Maximum density (1064 nm)	10 W/cm ² 0.1 J/cm ²	10 W/cm ² 0.1 J/cm ²	10 W/cm ² 0.1 J/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	D4σ (ISO compliant), 1/e ² along crosshairs (13.5%) FWHM along crosshairs (50%) Custom (%)		
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	11.3 x 11.3 mm	11.3 x 11.3 mm
Sensor area	1.28 cm ²	1.28 cm ²	1.28 cm ²
Effective aperture	Same as sensor	Same as sensor	20.5 x 20.5 mm
Dimensions (not including filter)	61H x 81.1W x 19.7D mm	61H x 81.1W x 19.7D mm	61H x 81.1W x 46.5D mm
Weight (head only)	138 g	138 g	235 g
ORDERING INFORMATION			
Compatible stand	STAND-D-233	STAND-D-233	STAND-D-233
Product page			

a. With a typical pixel multiplication factor (PMF) of 1.8.

Specifications are subject to change without notice
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