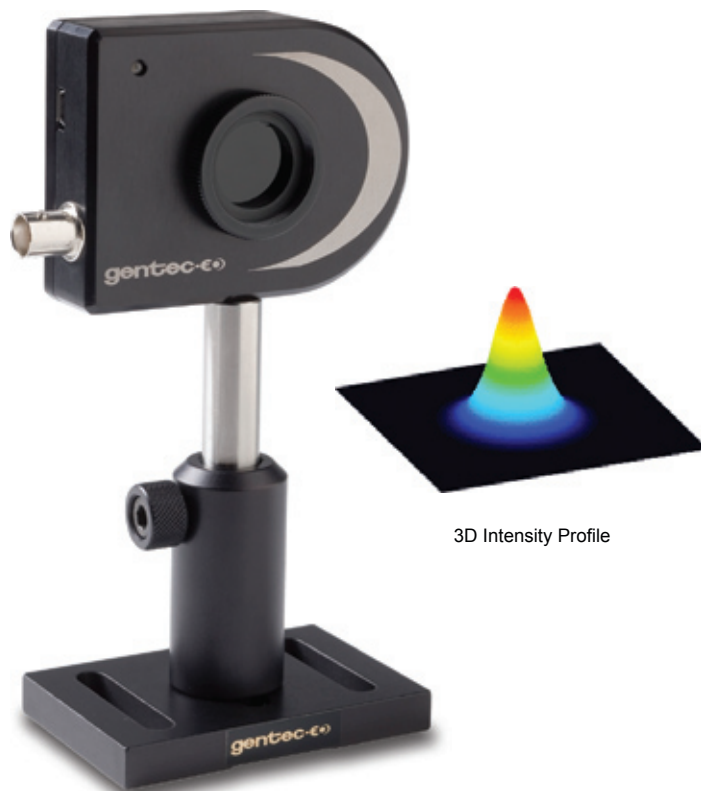


# BEAMAGE



1/2" and 2/3" CCD Cameras



3D Intensity Profile

Beamage



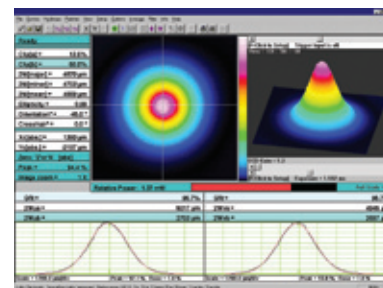
## Key Features

- 1 **Plug and Play**  
Direct USB2.0 connection
- 2 **For CW or Pulsed Lasers**  
Suitable for both CW and pulsed lasers, with single pulse capture up to 20 kHz
- 3 **User-Friendly Software**
  - . Background capture and subtraction
  - . XY profiles and centroids
  - . Gaussian and top hat fits
  - . Beam wander tool
- 4 **Auto Trigger**  
Automatically synchronizes to pulsed lasers
- 5 **M2 Capabilities**  
With optional M2 stage and lenses

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## Software



## Accessories

- » **M2 Stage**  
Measure the M2 value of your laser with the NEW M2DU option.
- » **ND and UV Filters**  
ND0.5, ND1.0, ND2.0, ND3.0 and ND4.0 filters and UG-11 «black glass» filter for 280 nm to 370 nm.
- » **Cam-IR and UV Converter**  
Extensions for IR viewing (1480 nm to 1680 nm or UV wavelengths conversion (10 or 20 mm apertures).
- » **CUB and CUB-UV Beam Splitters**  
Beam splitter cubes that take a fixed ratio beam sample.
- » **Variable Attenuator**  
ND filters mounted on a roulette for variable attenuation.
- » **Beam Expanders**  
Microscope objective and adapter for all wavelengths (4x, 10x, 20x and 50x).

## SPECIFICATIONS

Models	Beamage-CCD12	Beamage-CCD23
Sensor Technology	CCD	CCD
Effective Aperture	6.3 x 4.8 mm	8.8 x 6.6 mm

MEASUREMENT CAPABILITIES	CCD12	CCD23
Pixel Count	1.4 MPixels	1.4 MPixels
H x V	1360 x 1024	1360 x 1024
Pixel Dimension	4.65 x 4.65 $\mu\text{m}$	6.45 x 6.45 $\mu\text{m}$
Minimum Measurable Beam	~47 $\mu\text{m}$	~65 $\mu\text{m}$
Shutter Type	Synchronous	Synchronous
Maximum Full Frame Rate	~10 Hz	~10 Hz
Single Pulse Capture	20 kHz	20 kHz
Signal to RMS Noise	1000:1	1000:1
Electronic Shutter Dynamic Range	43 dB	43 dB
ADC	14-bit	14-bit

## WAVELENGTH RANGES

Standard	350 - 1150 nm	350 - 1150 nm
-1310 (residual silicon response)	350 - 1350 nm	350 - 1350 nm
-IR (with Phosphor coating) <sup>a</sup>	1480 - 1680 nm	1480 - 1680 nm
-UV <sup>b</sup>	260 - 380 nm	260 - 380 nm

DAMAGE THRESHOLDS <sup>c</sup>

Maximum Average Power	10 W	10 W
Saturation Level (1064 nm)		
Continuous Laser	10 W/cm <sup>2</sup>	10 W/cm <sup>2</sup>
Pulsed Laser	300 $\mu\text{J}/\text{cm}^2$	300 $\mu\text{J}/\text{cm}^2$

## PHYSICAL CHARACTERISTICS

Sensor Size	6.3 x 4.8 mm	8.8 x 6.6 mm
Dimensions (not including filter)	61H x 81.1W x 22.9D mm	61H x 81.1W x 22.9D mm
Weight (head only)	230 g	230 g

## ORDERING INFORMATION

Full Product Name	Beamage-CCD12	Beamage-CCD23
Product Number	201027	201028

a. With Phosphor coating. A standard Si chip camera can also be fitted with a cam-IR adaptor for NIR detection.

b. With UG11 filter instead of ND4. A standard Si chip camera can also be fitted with a UV converter for profiles down to 190 nm.

c. With ND4 filter.