

BQM-10

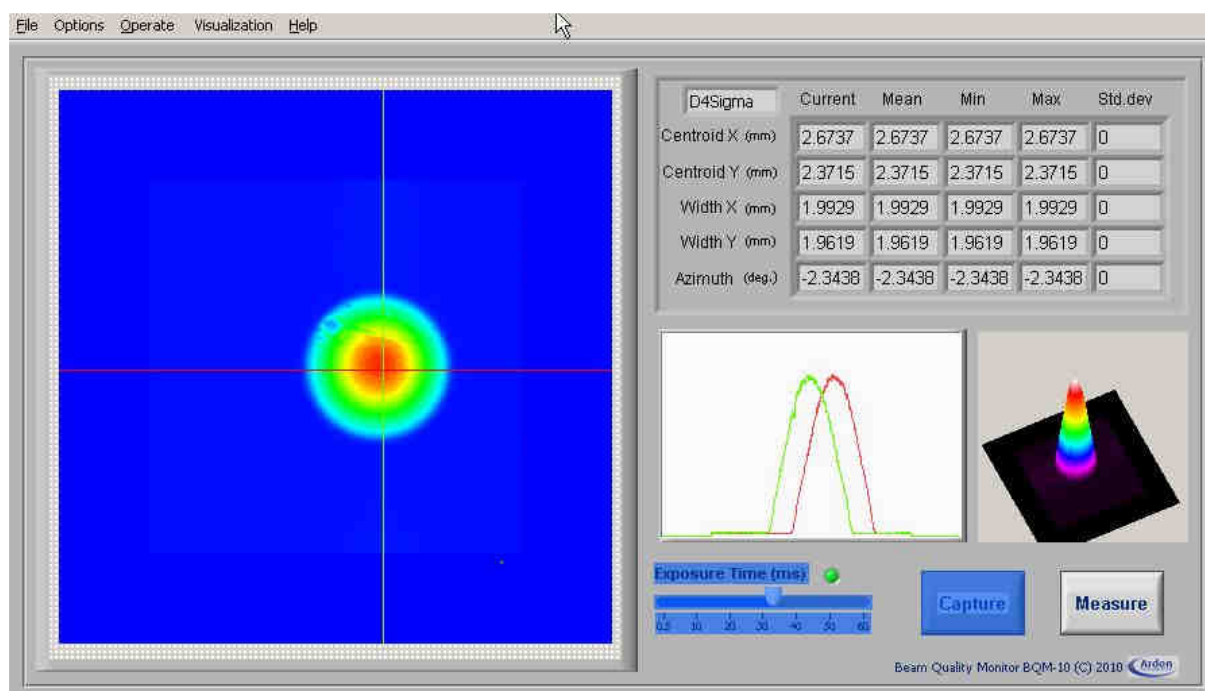


Laser Beam Profiler

The BQM10 laser beam profiler is a high precision, CCD based beam profiler for use with lasers with wavelengths between 350 and 1100 nm. Allied with our powerful but intuitive software package, the BQM10 makes quick and accurate characterisation of your lasers a reality.



The high quality 12-bit CCD array gives excellent resolution. Features include USB2.0 interface means portability and ease of use, RJ45 GPI/O connector for control of synchronization of lighting and 32MB on-board memory for frame buffering. Thus, the BQM10 can be easily transferred to different laptop or desktop computers. The user interface is simple and intuitive but with many useful features.



D4Sigma	Current	Mean	Min	Max	Std.dev
Centroid X (mm)	2.6737	2.6737	2.6737	2.6737	0
Centroid Y (mm)	2.3715	2.3715	2.3715	2.3715	0
Width X (mm)	1.9929	1.9929	1.9929	1.9929	0
Width Y (mm)	1.9619	1.9619	1.9619	1.9619	0
Azimuth (deg.)	-2.3438	-2.3438	-2.3438	-2.3438	0

Features :

- Measures parameters of ISO 11146 series of standards
- ½” format CCD 1392x1040 array with 4.65µm square pixels
- 12-bit digitization – 60dB dynamic range
- No frame grabber required (32MB RAM on-board memory)
- USB2.0 direct connection with no external power supply required
- Compact (45x45x56mm) and lightweight (130grams)
- Measures both CW and pulsed beams
- Second-moment and Gaussian fit
- ~3% beam diameter accuracy

Specification - Optical	
Sensor:	1.4 MegaPixel CCD ½”
Effective Pixel Elements:	1392 (H) x 1040 (V)
Pixel Size:	4.65µm x 4.65µm
Array Dimension:	6.5mm x 4.8mm
Wavelength:	360-1100nm; 250-1100nm with UV optics
Cover Glass:	Removed
Damage Threshold	0.15mW/cm ² CW, 1.0mJ/cm ² pulse
Min detectable power	0.17nW/ cm ²
Electrical	
Shutter Type:	Global
A/D Conversion:	12 bit with 8 bit optional
Maximum Frame Rate:	15 fps @ full resolution (30 fps @ 640x480)
Exposure range:	100µs to 66ms
USB 2.0 Connector:	USB mini-B 5 pin
USB 2.0 Cable:	USB mini-B 5 pin to USB A: 3m
Trigger:	Internal or External (software selectable)
External Trigger Specifications:	TTL (Positive transition)
Trigger Connector:	RJ45
Supply Voltage:	USB bus power
Supply Power:	<2.5 W
Mechanical	
Image Plane:	20mm from front surface
Filter/Lens Mount:	C-mount with CS-mount optional
Dimensions in mm:	44 W x 44 H x 56 D
Weight:	~130g
Camera Mounting Options:	One ¼” – 20 and Two M6
Environmental	
Operational Temperature:	0° - +50°C (+32°- 112°F)
Humidity:	50%-95%, relative, non-condensing

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