

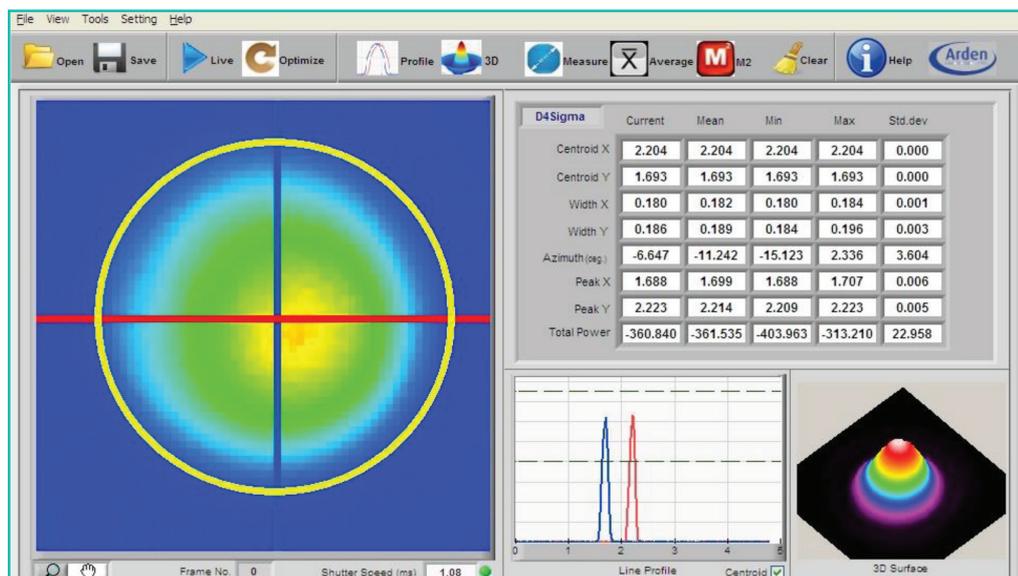


BQM-10/NIR/PS Laser Beam Profilers



The BQM-10 laser beam profiler range is a high precision, CCD and InGaAs based beam profilers for use with lasers with wavelengths between 400 and 1700 nm. Allied with our powerful but intuitive software packages, the BQM-10 range makes quick and accurate characterisation of your lasers a reality.

The high quality 12-bit CCD and InGaAs focal plane array gives an excellent resolution. Features include USB2.0 interface which means portability and ease of use. Thus, the BQM-10 range can be easily transferred to different laptop or desktop computers. The user interface is simple and intuitive but with many useful features.



Features

- 12-bit digitization – 60dB dynamic range
- No frame grabber required
- USB2.0 direct connection
- Measures both CW and pulsed beams
- Second-moment and Gaussian fit
- 3% beam width accuracy



BQM-10/NIR/PS

Laser Beam Profilers

Technical Specification

Part number	BQM-10	BQM-10 / NIR	BQM-10 / PS
Description	Laser beam profiler for wavelengths between 400 and 1100nm. System includes optical head (CCD camera), cables, CD with software, and user manual.	Laser beam profiler for wavelengths between 900 and 1700nm. System includes optical head (InGaAs camera), cables, CD with software, and user manual.	Laser beam profiler for wavelengths between 1400 and 1600nm. System includes optical head (CCD camera with built-in phosphor screen), cables, CD with software, and user manual.
Image			<i>Image not available</i>

General			
Wavelength range	400 - 1100nm	900 - 1700nm	1400 - 1600nm
Accuracy	+/- 3% on beam width	+/- 5% on beam width	+/- 5% on beam width
Dimension	45 x 45 x 56 mm	111 x 87 x 107 mm	45 x 45 x 150 mm
Beam size	0.4 to 1.5mm (can be varied with optional beam reducers)	0.4 to 2 mm (can be varied with optional beam reducers)	1 to 50mm (can be varied with optional beam reducers)
Dynamic range	>60dB	>60dB	>60dB
Sensor	1/2 inch CCD, 6.5 x 4.8mm array	9.6 x 7.6mm InGaAs focal plane array	1/2 inch CCD, 6.5 x 4.8mm array
Effective pixels	1392 x 1040, 4.65µm square pixels	320 x 256, 30µm square pixels	1392 x 1040, 4.65µm square pixels
Cover glass	Removed	Removed	Removed
Damage threshold	0.15mW/cm ² CW, 1.0 J/cm ² pulsed	1.3 uW/cm ² at 1550 nm	0.15mW/cm ² CW, 1.0 J/cm ² pulsed
Shutter type	Global	Global	Global
A/D conversion	12 bit	12 bit	12 bit
Maximum frame rate	15 fps (full frame @ full resolution)	100 fps	15 fps (full frame @ full resolution)
Exposure range	100 µs to 100 ms	0.5ms to 5ms	100 µs to 100 ms
Interface connector	USB 2.0, 3m mini-B to A and RJ45 trigger connector	USB 2.0	USB 2.0, 3m mini-B to A and RJ45 trigger connector
Trigger	Internal and external, TTL	External, TTL	Internal and external, TTL
Supply voltage	USB 2.0 full bus power	DC power supply provided	USB 2.0 full bus power
Supply power	~ 2.5 W	~ 20 W	~ 2.5 W

Environmental			
Operating temperature	0 - 50° C	0 - 50° C	0 - 50° C
Humidity	5%-95%, relative, non-condensing	5%-95%, relative, non-condensing	5%-95%, relative, non-condensing

Physical			
Mass	130g	1.8kg	250g
Mounting options	M6 threaded post hole	M6 threaded post hole	M6 threaded post hole



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Laser Beam Profilers

Ordering Information

Part Number	Description
BQM-10	Laser beam profiler for wavelength range 400 - 1100 nm. System includes optical head (CCD camera); user software on CD; cables; user manual
BQM-10/ NIR	Laser beam profiler for wavelength range 900 - 1700nm. System includes optical head (InGaAs camera); user software on CD; cables; user manual
BQM-10/ PS	Laser beam profiler for wavelength range 1400 - 1600nm. System includes optical head (CCD camera & built-in phosphor screen); user software on CD; cables; user manual

Accessories	
BQM-100-AR1	Attenuator wheel with 5 ND filters (ND 0.5; 1.0; 2.0; 4.0; 6.0) AR coated for wavelength range 350 - 700 nm
BQM-100-AR2	Attenuator wheel with 5 ND filters (ND 0.5; 1.0; 2.0; 4.0; 6.0) AR coated for wavelength range 650 - 1050 nm
BQM-110-AR1	Set of 5 ND filters (ND 0.5; 1.0; 2.0; 4.0; 6.0), screw mount, AR coated for wavelength range 350 - 700 nm, in box
BQM-110-AR2	Set of 5 ND filters (ND 0.5; 1.0; 2.0; 4.0; 6.0), screw mount, AR coated for wavelength range 650 - 1050 nm, in box
BQM-120-0532-25-UNP	High energy plate beamsplitter, mounted, 532 nm centre wavelength, unpolarised
BQM-120-0800-25-UNP	High energy plate beamsplitter, mounted, 800 nm centre wavelength, unpolarised
BQM-120-1064-25-UNP	High energy plate beamsplitter, mounted, 1064 nm centre wavelength, unpolarised
BQM-130-AR1	Beam sampler, AR coated for wavelength range 350 - 700 nm, picks off 1-10% of an incident beam
BQM-130-AR2	Beam sampler, AR coated for wavelength range 650 - 1050 nm, picks off 1-10% of an incident beam
BQM-200	Beam dump, 3/4 inch aperture, 50W maximum, air cooled
BQM-400-AR1	Beam expander/reducer, Galilean, 5X, AR coated for wavelength range 350 - 650 nm
BQM-400-AR2	Beam expander/reducer, Galilean, 5X, AR coated for wavelength range 650 - 1050 nm

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