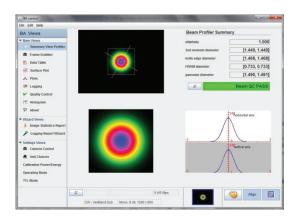




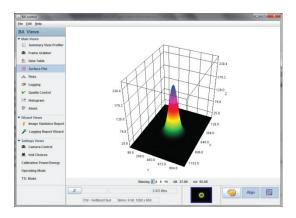
BA-CAMTM Laser Beam Profiling System

The BA-CAM Laser Beam Profiling system and software enables "real-time" laser beam measurement, analysis and monitoring of CW and pulsed lasers. The system design is based on the international standards ISO 11146 and ISO 13694 which relate to lasers and laser related equipment and laser beam spatial metrics.



In every laser application, the laser beam profile provides valuable information for the most efficient use of the laser. By monitoring the laser beams spatial profile, circularity, centroid, astigmatism and M2 values, you have early warning of any problems with the laser and entire beam delivery optical system. This relates to increased quality, process reliability, and reduced scrap.

The Laser Beam Profiling system is modular in design and can be configured for most applications and laser wavelengths.



The design contains no "moving components" and provides instantaneous measurements and analysis of the laser beam and all active optical elements.

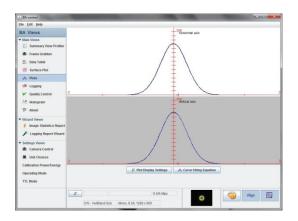
The BeamAnalyzer Camera provides "Real-Time" viewing of spatial distribution, measurement, analysis and monitoring of laser power, beam diameter, beam ovality, beam center and beam centroid.

When used in a beam delivery system, the BA-CAM can sample the unfocused laser beam (via beam splitter or 99.5% reflective mirror) prior to a focus lens.



The BA-CAM can monitor the laser beam for degradation, stability, power, alignment and tuning. A beam reduction optic is required for laser beams larger than 5 mm in diameter. Haas Laser Technologies offers a wide array of attenuation options and pick off optics monitoring a laser beam profile in a real time environment.

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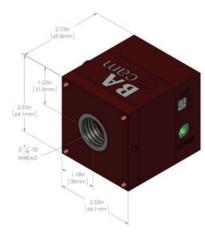


When used in a beam delivery system, the BA-CAM can sample the unfocused laser beam (via beam splitter or 99.5% reflective mirror) prior to a focus lens. The BA-CAM can monitor the laser beam for degradation, stability, power, alignment and tuning. A beam reduction optic is required for laser beams larger than 5 mm in diameter. Haas Laser Technologies offers a wide array of attenuation options and pick off optics monitoring a laser beam profile in a real time environment.

FEATURES

Dual Camera Mode	M2 measurement with BWA-CAM Camera (optional)	
Auto Tracking of ROIs	Software Auto Sizes and Tracks all ROIs	
QC Measurement	All Beam Quality Metrics Monitored & Flagged for External Interlocking Control	
Extended Report Generations	ISO Report Generator of all Beam Quality Metrics	
Extended Logging Capabilities	All Beam Quality Metrics	
Attenuation/Filtering	Includes filter cartridge for ND filters and color filters	
Optional High Power Attenuator	For Power Levels to 20 kilowatts	
Alignment	Easy Setup, Alignment and Calibration	
Beam Reduction Optic	Optional	





SPECIFICATIONS

PARAMETER	DESCRIPTION	UNITS
Sensor	CMOS Chip, ½" (5:4)	
Resolution	1280 x 1024 Monochrome	
Pixel Size	5.2 x 5.2	μm
Active Sensor Area	6.66 x 5.32	mm
Scanning System	Progressive	
Dynamic Range	68	dB
Sensor SNR	45	dB
Gray Level	8	bit
Responsivity	2.1	V/lux-sec
Frame Rate	>25	fps
Trigger	Auto or External (DIN 8)	
Power Consumption	<1.8	W
Connection	USB 2.0 Host Controller	
Dimensions (I x w x h)	82.5 x 60.3 x 60.3	mm ³
Weight	350	g
Temperature Range	0 to 45	°C
Relative Humidity	5% - 95%	
(non-condensing)		
Wavelength Range	190 to 1100	nm
Built-in Attenuation	Optional	OD

Specifications subject to change without notice. Consult a Haas Laser Technologies engineer (973) 598-1150 for the latest specification changes or any additional assistance.

Technical drawings of our products are available at www.haaslti.com. Contact sales@haaslti.com for additional information.