# BA-CAM-S4 (4MP)

The BA-CAM® **B**eam **A**nalyzer **CAM**era and software enables laser beam measurement, analysis and monitoring of CW and pulsed lasers. The system design is based on the international standards 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 values, the system provides 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 BA-CAM 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.
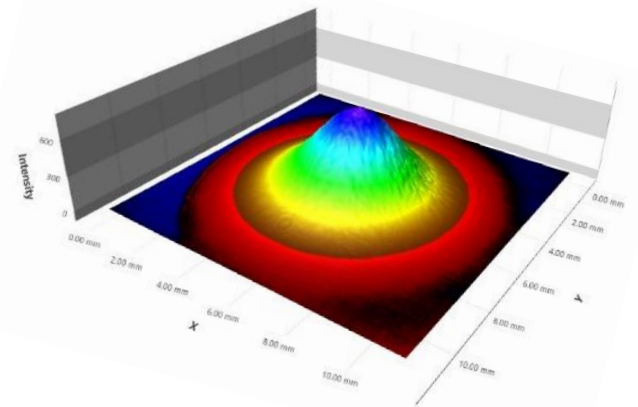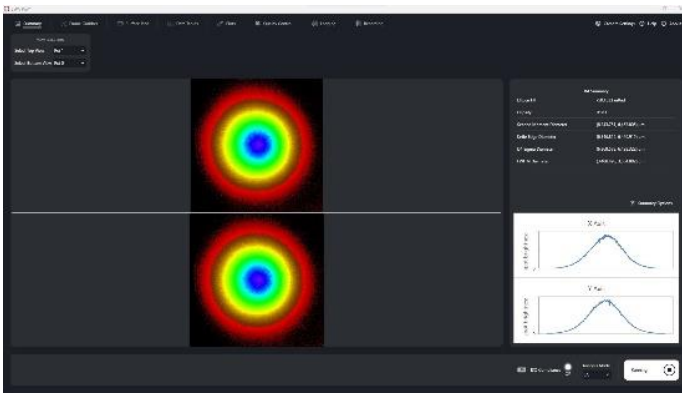
The BA-CAM utilizes decades of industrial beam delivery technology to customize the camera to meet the most demanding applications the most compact, lightest weight profile measurement system on the market.

BA-CAM configurations available for powers up to 30 kilowatts and fiber core sizes from single mode to any multimode size.
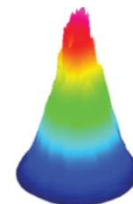
Features & Specifications

Optical	
Inherent Attenuation	None (external attenuation needed to be used with a laser)
Maximum Beam Diameter	8.5 mm
Minimum Spot Size	55 microns
Auto Tracking of ROI	Software Auto Sizes and Tracks Region of Interest (ROI)
QC Measurement	All Beam Quality Metrics Monitored and Flagged for External Interlocking Control
Extended Report Generations	ISO Report Generator of all Beam Quality Metrics
Logging & Recording Capability	All Beam Quality Metrics and Record Live Camera Measurements for Offline Playback
Attenuation	Provided Separately (Contact Haas LTI for Options)
Alignment	Easy Setup, Alignment and Calibration
Single or Dual Camera	Measurement with Single or Dual Cameras

Parameter	Description	Units
Sensor	CMOS, 1" (1:1)	
Pixel Area	2048 x 2048 Monochrome	
Pixel Size	5.5 x 5.5	μm
Active Sensor Area	11.26 x 11.26	mm
Scanning System	Progressive (Global Shutter)	
Gray Level	10	bits
Frame Rate (in 8-bit mode)	25	fps
Trigger	Auto or External (DIN 6)	
†Power Consumption	<3.6	W
Interface	POE 1 GigE	
Dimensions (L x W x H)	~ 197.9 x 100.96 x 60.0	mm
Weight	~0.9	kg
Temperature Range	0 - 50	°C
Relative Humidity (non-condensing)	20% - 80%	
Wavelengths	*200 - 1200	nm
Built-in Attenuation	None	OD

†Power Over Ethernet (POE) Injector or switch, 48V 15.4W Power Over Ethernet, IEEE 802.3af
Compliant, 10/100/1000Mbps and Category 5e, 6, or 6a cables only are not included with system.
*Requires Optional UV-Coating for wavelengths less than 350nm

[55.9mm] 2.20in

[35.0mm] 1.38in

[35.0mm] 1.38in

[64.5mm] 2.54in
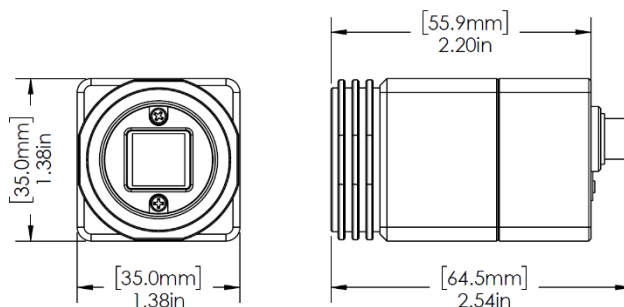
Specifications subject to change without notice. Consult a Haas Laser Technologies engineer (973) 598-1150 for the latest specification changes or any additional assistance. Technical drawings of our products are available at www.haaslti.com. Contact sale@haaslit.com for ordering information.