

Laser beam profiler SPECIFICATION



Functional capabilities

Beam width parameters	FWHM, $1/e^2$, $1/e$, 4σ statistical moments up to 4th for X and Y directions independently	Visualization	2D & 3D
Beam pointing stability	Customizable in Cartesian and Polar coordinates	Calculation frequency	Up to 4Hz
Auto centering	Center of the beam is found automatically	FPS	1-25 range with 1 fps increment
Manual measurement tools	Cursors: horizontal, vertical, free hand; spot probe; zoom-in lens	Exposure time	0.12-24.62 ms with 0.03 ms increment
Automatic detection of beam artefacts and trends*	Yes, with cloud backed with artificial intelligence	Gain	0-100
Long term data storage*	Yes. Via cloud system in the web browser	Parameters setup mode	Auto & manual
Remote preview*	Yes. Via cloud system in the web browser	Operation mode	Free run or hardware triggering
Fitting	Gauss and Lorentz fit for X and Y direction independently; Returning distribution parameters	Noise correction	DNC technology (c.f. User Manual for description)
Beam geometry	Astigmatic and elliptical	ISO standards reference	ISO 11146-1, ISO 11146-2, and ISO 11146-3
Metrology	3 types of cursors for manual measurement	Software language	English, Polish

^{*} Option available in subscription model. 3 months of free testing period.

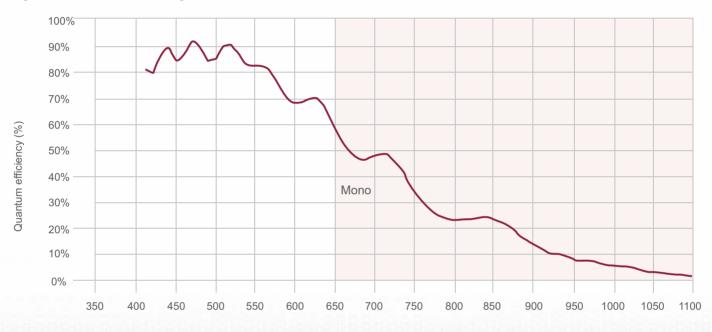
Sensor & Mechanics



Pixel Class	5 MP
Resolution	5.04 MPix
Resolution (h x v)	2592 x 1944 px
Aspect ratio	4:3
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/2.5"
Optical Size	5.702 mm x 4.277 mm
Optical sensor diagonal	7.13 mm (1/2.24")
Pixel size	2.20 μm
Sensor manufacturer	ONSEMI
Sensor model	Ar0521
Sensor type	CMOS Mono

Shutter	Rolling Shutter			
Sensor characteristic	Linear			
Readout mode	Progressive scan			
Ambient conditions				
Device temperature during operation	0 °C- 55 °C / 32°F- 131 °F			
Device temperature during storage	-20 °C- 80 °C /-4 °F- 176 °F			
Humidity (relative, non-condensing)	20 % - 80 %			
Connectors				
Interface connector	USB Type-C, Standard 3.1			
Power supply	USB cable			
Interface-Speed	5.00 Gbps			
IP code	No			

Spectral sensitivity







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