

LS-View

Vision through the scanner

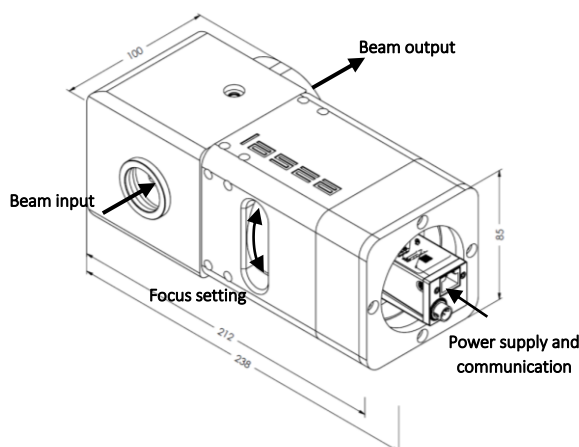
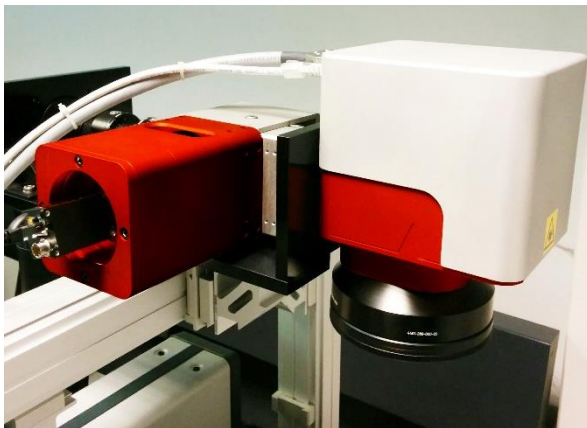
Dedicated to scan field observation before, during, and after the laser process, the LS-View is a passive vision system aligned with the laser beam. **No mechanical stage movement** is required to get a clear image of the workpiece.

Before the process, viewing the scan field center can help positioning the workpiece at the right place. During the process, displaying the ablation allows a visual monitoring of the process. After the process, another visual inspection can validate that the ablation has been done where it was supposed to be.

Including a dichroic optic for wavelength splitting, an objective with its focus setting, an interference filter for getting a sharp image, and a 1/2" camera, the LS-View offers a direct visualization of the center of the laser scan field, with **resolutions down to 8 μm** .

In addition to XY positioning, vertical resolution is in the range of the laser Rayleigh length which allows a **fast Z positioning** of the workpiece without having to engrave it.

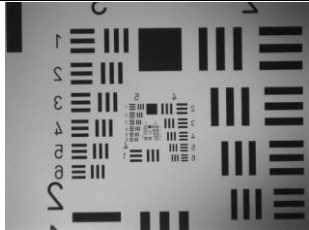
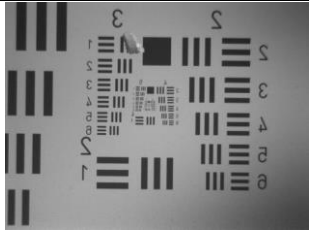
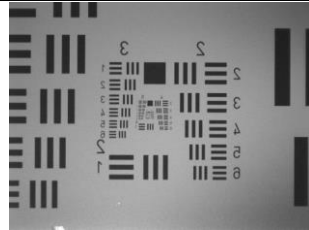
Directly connected to a computer through an ethernet interface, the LS-View's camera is displayed in our software KYLA®, a full **micromachining software** able to communicate with several stages, cameras, and lasers. Alternatively, the image can be displayed on another software as any standard camera.



Key features

- High resolution image
- Less than 2% laser attenuation
- Focus setting

Base features	LS-View IR	LS-View VIS	LS-View UV
Laser wavelengths	1.030/1.064 nm	515/532 nm	343/355 nm
Clear Aperture	22 mm		
Maximum power	50 W		
Maximum allowed energy (@300fs)	300 µJ	150 µJ	30 µJ
Maximum allowed energy (@10ns)	1 mJ	500 µJ	100 µJ
Transmission	> 98 %		
Observation wavelength	700 nm		
Reflection band (camera)	420 – 900 nm	615 – 900 nm	420 – 900 nm
Transmission band (laser)	990 – 1.600 nm	490 – 532 nm	340 – 360 nm
Size	251 x 115 x 85 mm ³		

	F-Theta objectives		
	50 mm	80 mm	100 mm
Focal length	50 mm	80 mm	100 mm
Field size	3,9 x 2,9 mm ²	7,2 x 5,4 mm ²	7,7 x 5,8 mm ²
Optical resolution	8 µm	11 µm	14 µm
USAF test			

These data can change according to LS-Scan input aperture, telecentricity, or lighting

	Power requirements
Power supply	Power over Ethernet or 24V – 500 mA
Connection	GigE RJ45