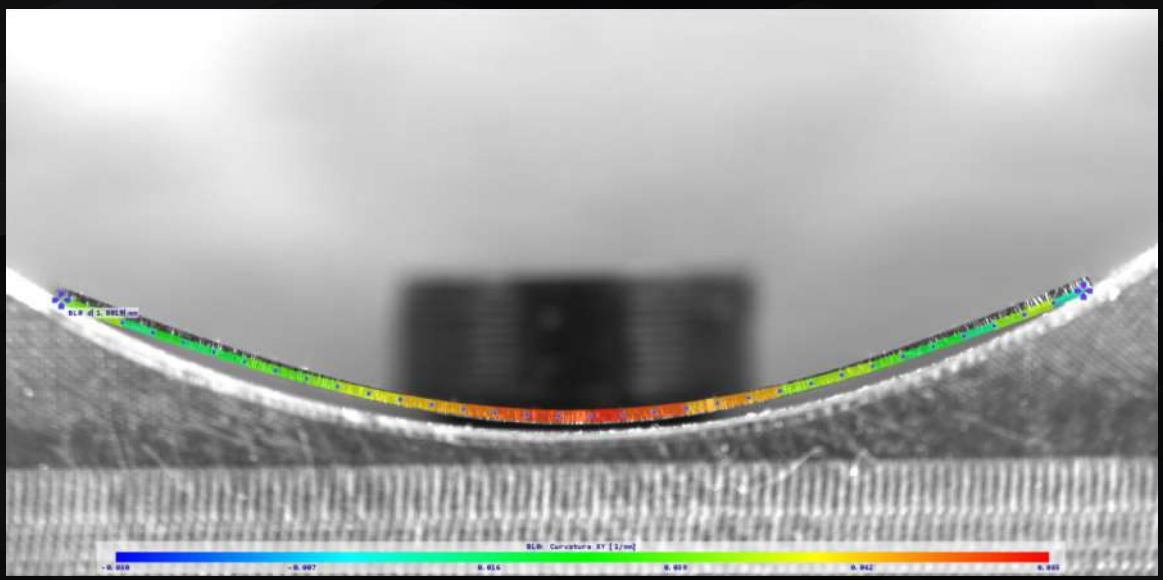
DIC ALPHA 2023 SP1

The 2023 SP1 (Service Pack) release brings a new improved version of DIC measurement software ALPHA. We are Xsighted to present new features and summarize other improvements.

Line Value Distribution enhancements

The measured parameters, deflections, curvature and strains can be plotted as colored segments to the line tools.

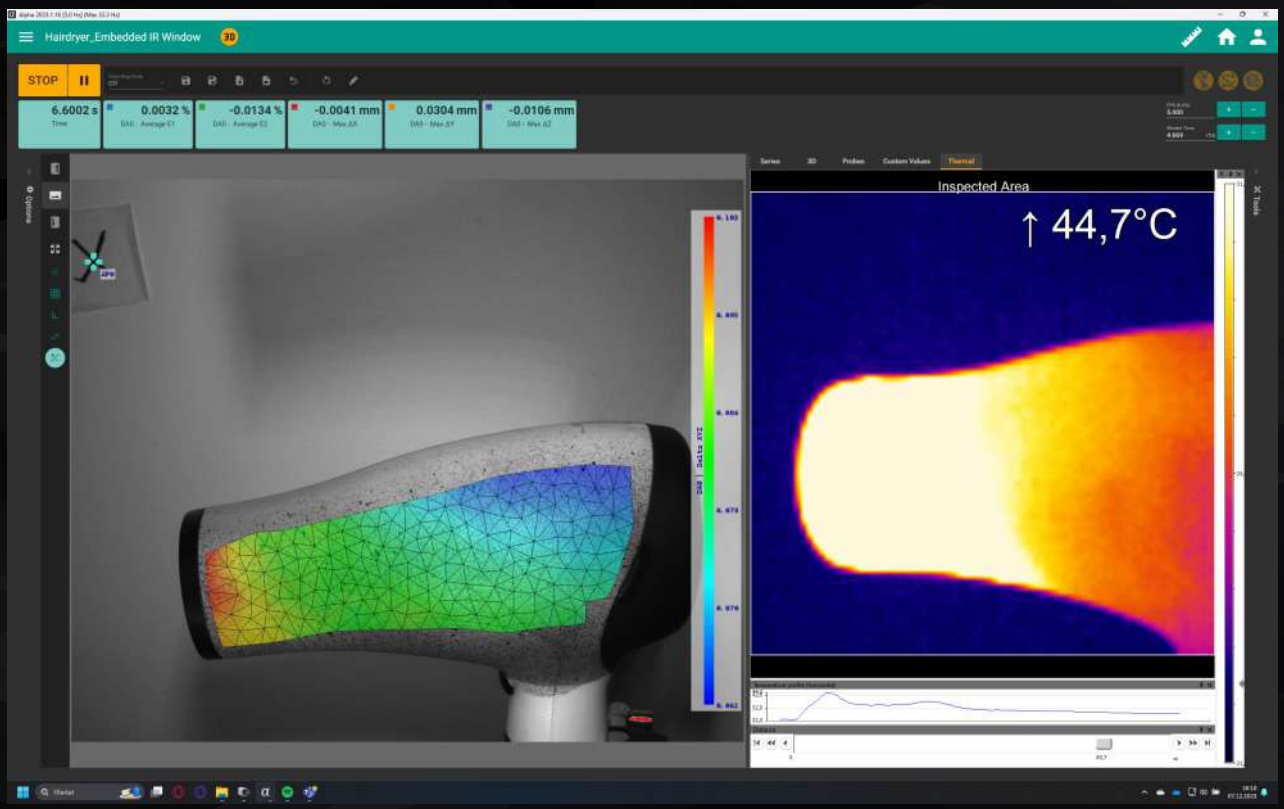
The visualization of deflections [mm]



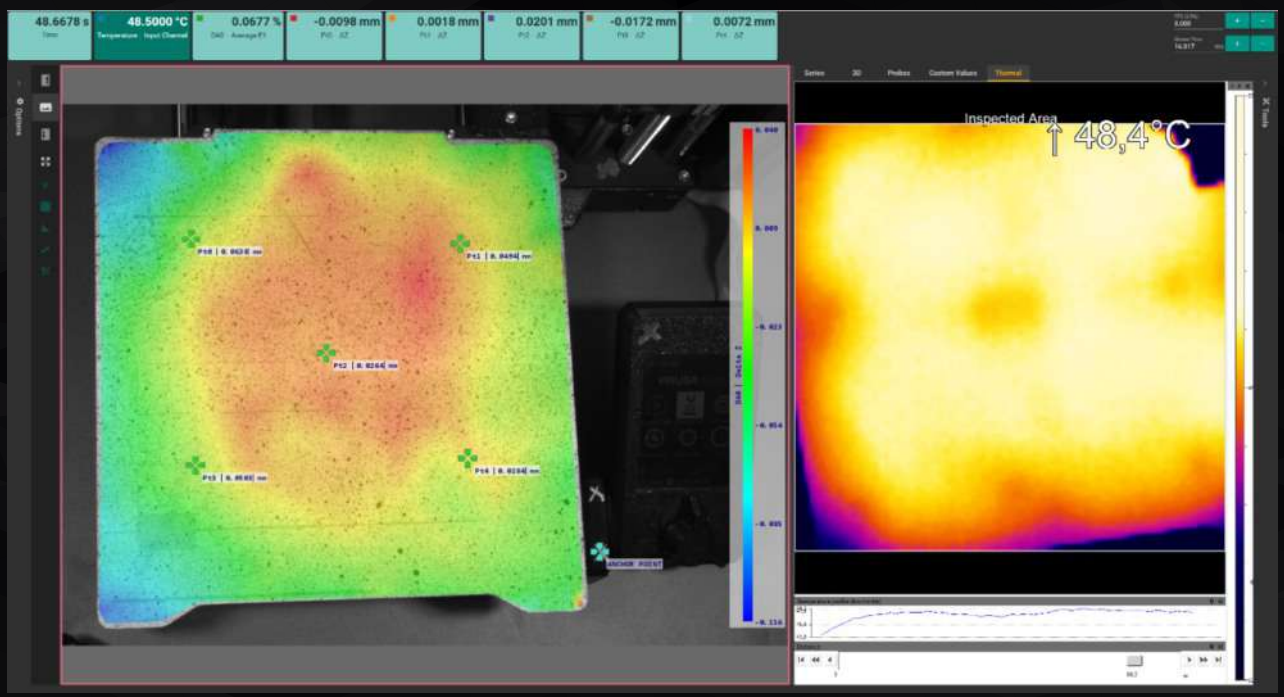
The visualization of curvatures [1/mm]

Embedded thermal camera view

A thermal camera view can be embedded in the main measurement window, allowing to control the readout of temperatures independently of the DIC measurement. The view of the thermal camera does not need to be exactly aligned to the area of interest of the optical camera and can measure a completely different part of the experiment. Even if the optical camera does not provide an evaluation of deformations during a real-time experiment, the temperatures are still measured and can be used in real-time for experiment control, regulation, and long-term testing.



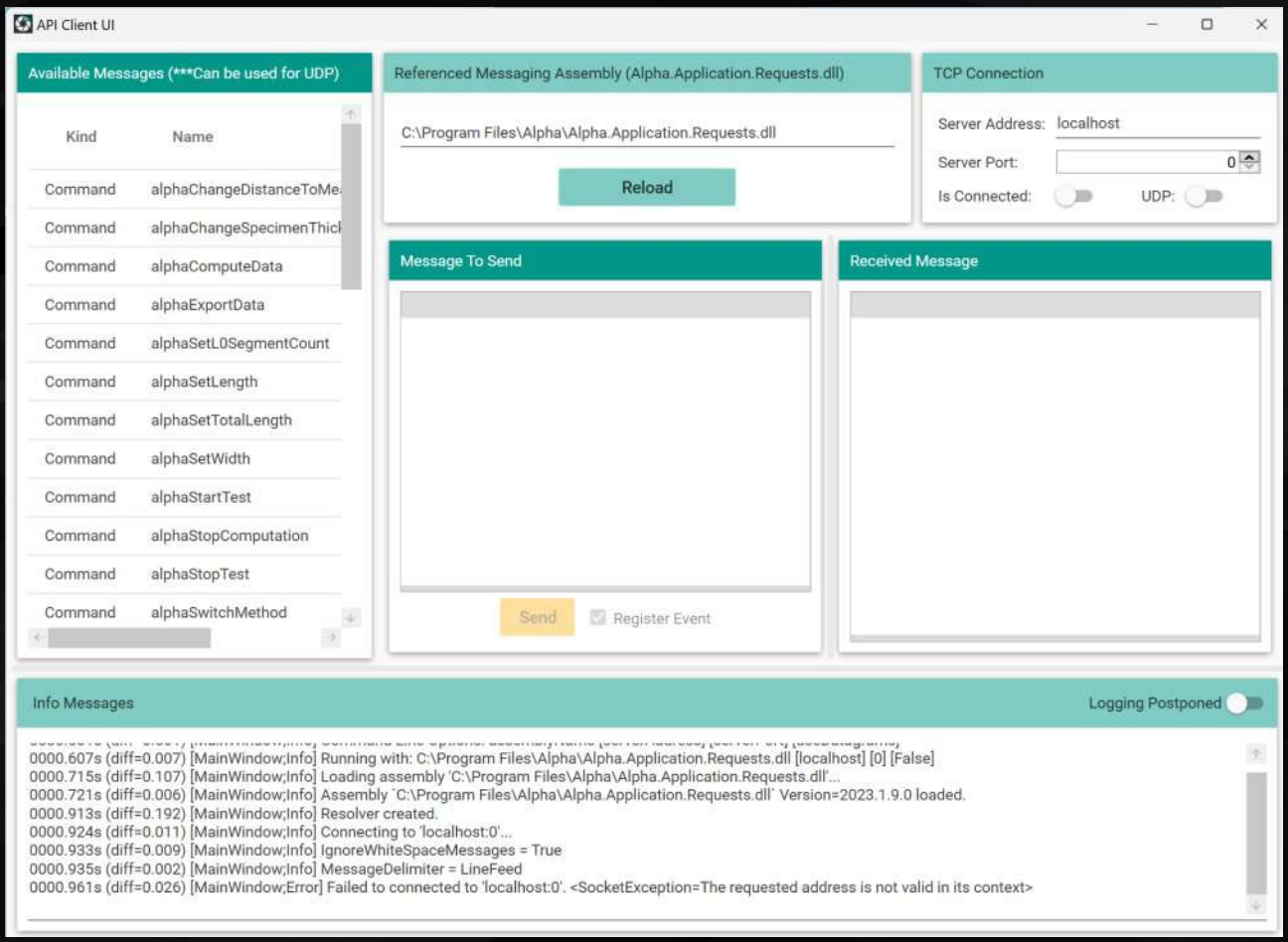
The independent embedded thermal camera view of FAN experiment



The independent embedded thermal camera view of 3D printer experiment

X-Sight API (Application programming interface)

The X-Sight video extensometers and DIC systems can be effectively operated by API which can be implemented in many ways. The integrated API test client helps with quick integration and testing.



Integrated test client for a quick API set-up

The users can download examples of the API implementation for LabView, C#, and Rust. Any other, like Python, MATLAB, Octave, and more can be provided by X-Sight technical support.

Beyond the API, many other I/O communication protocols, A/D, and D/A devices are supported. The X-Sight DIC software ALPHA now supports more than 20 used test machine interfaces worldwide.

ALPHA 2023 SP1 release integrates the following 11 major improvements:

- Added Modbus Output service
- Added possibility of setting Custom Values as method-specific
- Added LOADED notification of Mercury API output
- Added sinusoidal interpolation methods to libraries used by Custom Value scripts
- Improved bug reporting from About page
- Embedded thermal camera view
- Configurable channel count in digital I/O devices
- Sigma data export and management (both in RT and PP, under Research module)
- Additional Bend Line segment value types - Deflection, Curvature
- Allowed image recording/export without PP license
- Added new licensing modules - Thermo Mechanical, Planar

ALPHA 2023 SP1 release also integrates additional 49 minor improvements.