Live full Stokes polarization imaging in the visible in passive or active configuration
Live computation of any derived polarization parameter: DOP, DOLP, DOCP, AOP, Ellipticity.
Passive and Active polarization imaging

What measurements can be performed?

- Retardance mapping / Stress measurement
- Stokes/Mueller imagery
- Contrast enhancement
- Target detection/identification
Along with the intensity and the spectrum, the polarization of light carries abundant information. The Stokes formalism allows for complete description of any partial or total polarization state. While most of the available polarization imaging cameras perform only linear Stokes polarization imaging (only the linear polarization can be quantified), SALSA performs live measurement of the full Stokes vector for each pixel of the image at a video frame rate. Many polarization-related parameters can be visualized in real time such as the Stokes parameters ($S_0$, $S_1$, $S_2$ & $S_3$), the Degree Of Polarization Linear (DOLP) or Circular (DOCP), the Degree Of Polarization (DOP), the Angle Of Polarization (AOP), the Ellipticity angle, etc.
A user-friendly software allows a Full Stokes polarization analysis for each pixel of the image, in real time. The user can select a Region Of Interest and visualize all polarization data in live or in analysis mode, save images and record polarization movies.

**SOFTWARE**

**ONE CAMERA, MANY APPLICATIONS**

- **Biology**
- **Target detection**
- **3D reconstruction**
- **Stress mapping**
SALSA is calibrated in the factory for a specific bandwidth. The typical precisions for Degree Of Linear Polarization is 3% (P-V), 0.35% STDV, and for Degree Of Circular Polarization: 2% (P-V), 0.75% STDV.