



## Structured Light Measurements

Our FSLM-2K55-P phase-type spatial light modulator can carry out research on the measurement method of key geometric parameters of self-focusing lenses based on the principle of 3D imaging.

### Experimental principle

The system generates structured light through the SLM to irradiate the self-focusing lens, generating additional feature points, and extracts the feature points on the surface of the self-focusing lens by using the multi-vision method. Based on the geometric characteristics of the self-focusing lens itself as a cylinder, we complete the matching of the self-focusing lens, and then combine the data from the calibration of the system itself to complete the 3D reconstruction and derive the 3D information of the self-focusing lens.



Schematic diagram of SLM generating structured light Projected



Structured Light

### Application direction

The key geometric parameters of the self-focusing lens are investigated to seek a non-contact and non-damaging inspection scheme that can measure multiple sets of data, and finally a combined scheme of 3D measurement of self-focusing lens with structured light multi-vision is used for one-time inspection of these parameters, which is used as a basis for rapid classification of different batches of products.