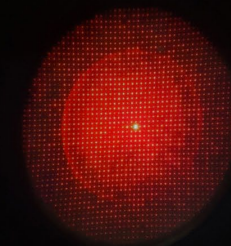




Image Engineering

A new dimension in geometric camera calibration



Geometric camera calibration

Why is it essential?

- To measure distance in images
- To detect objects in images
- To compensate for high distortion levels especially for wide field-of-view cameras
- To accurately align stereo camera pairs



GEOCAL

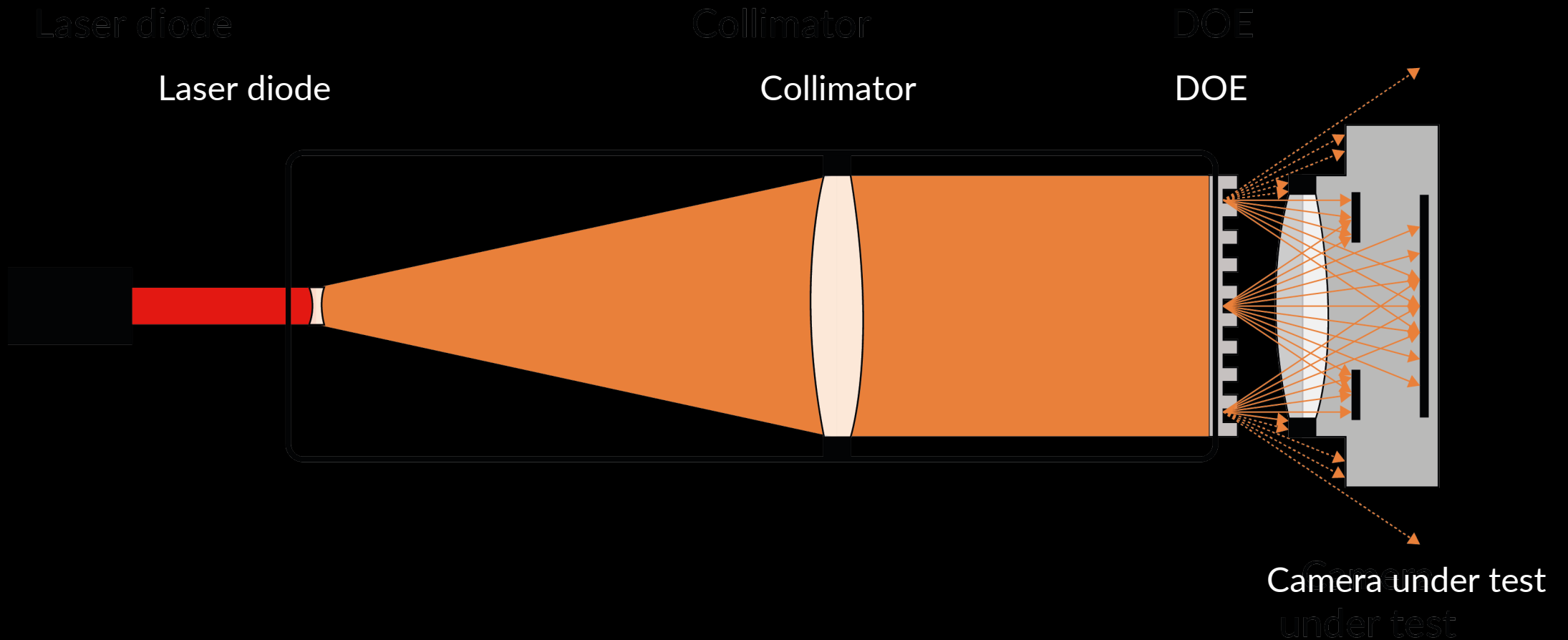
A new dimension in geometric camera calibration

- Create a regular grid of light spots from infinity
- Camera position is translation invariant*
- Easily manage the angle of camera rotation
- No relay lens required
- A very compact design
- Calibrate large field-of-view cameras
- Stereo camera alignments and adjustments
- Remove lens distortion using GEOCAL and OpenCV



The GEOCAL concept

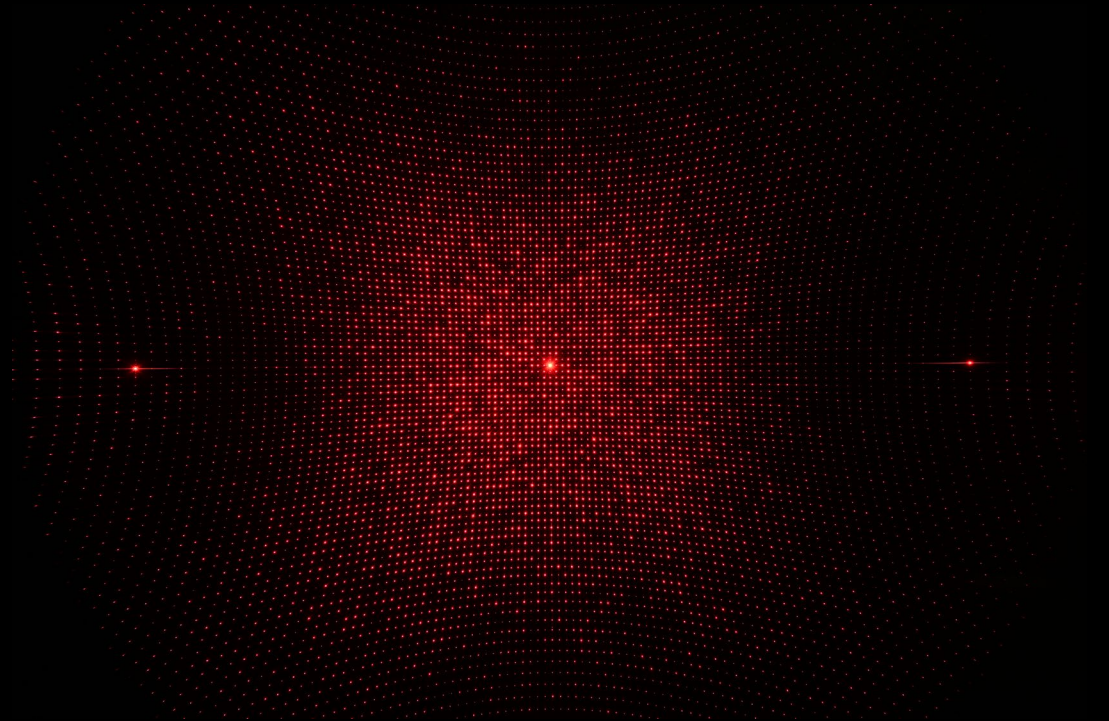
A beam expanded laser in combination with a diffractive optical element (DOE)



Geometric camera calibration



GEOCAL XL and IR versions available



Generate a grid of light spots originating from infinity