



TRIOPTICS

See the Difference.

CamTest R&D

Versatile Measurement System
for Camera Modules



The CamTest R&D is a versatile measurement device for testing various image quality parameters of camera modules. It features a wide off-axis angle range of up to $\pm 90^\circ$. The computer-controlled test target distance can be freely selected from finite distances to infinity using a focusing collimator. The CamTest R&D can be used for many different types of camera modules and is highly flexible in terms of measurements at different field positions. Configurations for different wavelength ranges (VIS and NIR) are available. This versatility makes the test instrument an ideal solution for comprehensive measurement tasks in R&D environment.

The CamTest R&D is based on the tried and tested ImageMaster[®] HR, the industry standard for testing image quality of objectives. Due to this fact, existing ImageMaster[®] HR instruments can be easily upgraded to CamTest R&D devices.

MTF Lab Software

The MTF Lab software supports and analyzes the following measurement parameters:

- Image quality properties: LSF, MTF, MTF vs. Focus, MTF vs. Field, distortion
- Opto-mechanical properties: defocus, shift and tilt of the sensor position
- Color properties: longitudinal chromatic aberrations, lateral chromatic aberrations (only with RGB-LED illumination)
- Customized measurement programs can be generated with the existing scripting language, e. g. for data output



Upgrade: IM[®] HR to CamTest R&D

Technical Data

Sample Effective Focal Length (EFL)	1.8 to 16 mm
Field of View	Up to $\pm 90^\circ$ (up to $\pm 110^\circ$ after individual clarification)
Cycle Time Measurement	2 s – 1 min*
Variable Object Distance	0.5 m – infinity
Footprint (Width, Depth, Height)	1500 mm, 800 mm, 2000 mm
Camera Interface	Software Development Kit (SDK) provided enabling to connect to all standard interfaces (either MIPI, analog or directly to e.g. USB, FireWire, CamLink, GigE).

* Depending on the number of different parameters to be measured