The Optikos LensCheck™ LWIR lens measurement instrument is a unique, cost-effective solution to your infrared production and prototype lens qualification needs. Optikos, the leader in image quality test equipment, is pleased to expand the product line with this compact, efficient, easy-to-use quality control tool.

Based on over thirty years experience in optical product development and featuring the Optikos patented VideoMTF® image analysis software, the LensCheck™ LWIR features real-time Infrared MTF testing and analysis enabling manufacturers to qualify incoming products quickly and reliably, thereby minimizing the risks of sub-standard complete assemblies.

Features
- Patented VideoMTF® technology enables real time MTF measurements
- Flexible platform allows a wide range of measurements (e.g. MTF, EFL, distortion)
- Industry leading measurement accuracy and repeatability
- Configurable automated measurement routines
- Easily switch between wavebands (VIS/NIR, SWIR, or LWIR)
- Installed in production and R&D facilities around the world

Measure
- MTF – on/off axis
- EFL
- Astigmatism
- Field Curvature
- Distortion
- Line of Sight (optional)

Visit us at www.optikos.com

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Wakefield, MA 01880
Phone: 617-354-7557
Fax: 617-354-5946
Email: sales@optikos.com

**System Specifications**

### Performance

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>MTF accuracy</strong></td>
<td>+/- 3 % to 30 lp/mm</td>
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<tr>
<td><strong>MTF repeatability</strong></td>
<td>+/- 2 % to 30 lp/mm</td>
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</tbody>
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(Validated using LWIR Audit Lens)

### Key Attributes

<table>
<thead>
<tr>
<th>Component</th>
<th>Specifications</th>
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<tbody>
<tr>
<td><strong>Refractive Collimator</strong></td>
<td>360mm EFL&lt;br&gt;&gt; 50mm clear aperture</td>
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<tr>
<td><strong>Source Module</strong></td>
<td>Broadband Infrared Emitter: 7.5 – 15 microns&lt;br&gt;12-position high-speed motorized target wheel&lt;br&gt;Target set: slits, pinholes, alignment target&lt;br&gt;8 – 12 micron bandpass filter</td>
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<tr>
<td><strong>LWIR Image Analyzer</strong></td>
<td>Uncooled Microbolometer&lt;br&gt;320 x 240 pixel array&lt;br&gt;Spectral sensitivity 7.5 – 15 microns&lt;br&gt;Calibrated 7.5X 0.70NA Relay Lens</td>
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<tr>
<td><strong>Image Analyzer Mount</strong></td>
<td>Motorized Z-axis: 25 mm travel 0.1 micron resolution&lt;br&gt;Motorized X-axis: 25 mm travel with 0.05 micron resolution&lt;br&gt;Manual Y-axis: 12.5 mm travel</td>
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<tr>
<td><strong>Motorized Lens Platform</strong></td>
<td>+/- 100 degree off-axis rotation&lt;br&gt;0.0001° resolution glass scale encoder&lt;br&gt;0.5 m optical rail&lt;br&gt;Integrated self-centering lens mount</td>
</tr>
<tr>
<td><strong>Computer System</strong></td>
<td>Mechanical&lt;br&gt;Footprint: 43.5” x 17.8” (110.5 x 45 cm)&lt;br&gt;Weight: Approximately 50 lbs (22.7 kg)</td>
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</table>

*MTF accuracy and repeatability is dependent on the type of lens under test.<br>All specifications are subject to change without notice. Contact Optikos Corporation to discuss your application.

### Also Available:

- **LensCheck™ VIS**
- **LensCheck™ VIS Finite Conjugate**
- **Lenscheck™ SWIR**