A NEW LINE OF ACTIVE THERMOGRAPHY SOLUTIONS.

Nondestructive solutions are now available with the most powerful infrared cameras on the planet. Telops’ new TESTD series offer nondestructive testing systems for the evaluation of materials, components or assemblies in order to detect defects without damaging the material under test.

Telops’ TESTD Solutions use non-contact IR methods based on active thermography to detect damage from corrosion, delamination, decay, voids, inclusions and other irregularities.

The new TESTD-PT system

ULTRAHIGH FRAME RATE

High performance electronics produce thermal images at rates of up to 3 000 fps, depending on the model. Subwindows can even be acquired at rates higher than 100 000 fps. With such high speeds, NDT can be performed even on very thin or highly conductive materials.

HIGH SENSITIVITY

With Telops cameras, temperature differences as small as 18mK can be detected, allowing the detection of challenging targets, such as heat dissipation in electronic circuits.

ADVANCED CALIBRATION

Unique proprietary real-time processing of infrared images such as NUC, radiometric temperature, automated exposure control (AEC) and enhanced high-dynamic-range imaging (EHDRI) guarantee ease of use and operation flexibility as well as accurate measurements over the entire camera’s operation range.

POWERFUL SOFTWARE

Straightforward, powerful post-processing software provides results in a fast and reliable way. The software offers various triggering methods that are both elaborate and repeatable, as well as an integrated keystone effect correction.

EXAMPLES OF TYPICAL USES

- Carbon fiber reinforced polymer (CFRP) delamination.
- Detection of impact damages in composite material.
- Detection of corrosion under paint.
TECHNICAL SPECIFICATIONS

TELOPS TESTD-PT SYSTEM.

INCLUDES:
- A portable flash generator
- A flash lamp with reflector
- A filter set for the lamp
- A tripod for the lamp
- An ESG signal generator with TESTD-PT extension
- An interfacing PT software socket for Reveal Lab
- A Telops IR Camera
- Reveal Lab Software

Optional: 5-m or 10-m trigger BNC cable for sync-in and sync-out to/from camera
Optional: Safety googles for eye protection EN166 (scale number 5.0)

TESTED-PT Series.

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>TESTD-PT 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENERGY</td>
<td>6 kJ</td>
</tr>
<tr>
<td>REFLECTOR</td>
<td>7” Bayonet</td>
</tr>
<tr>
<td>OUTPUT CHANNELS</td>
<td>1 or 2</td>
</tr>
<tr>
<td>REAL-TIME SYNCHRONIZATION</td>
<td>Yes</td>
</tr>
<tr>
<td>COMMUNICATION INTERFACE</td>
<td>RS485</td>
</tr>
<tr>
<td>SUITABLE FOR CONTINUOUS OPERATION</td>
<td>No</td>
</tr>
<tr>
<td>CONNECTOR FOR STANDARD FLASH HEADS</td>
<td>Yes</td>
</tr>
<tr>
<td>CONNECTOR FOR LINEAR HIGH-POWER FLASH HEAD</td>
<td>Yes</td>
</tr>
<tr>
<td>FLASH CABLE LENGTH</td>
<td>5 m</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>20 kg (w/o lamp)</td>
</tr>
<tr>
<td>POWER</td>
<td>110/230 VAC</td>
</tr>
<tr>
<td></td>
<td>Fusing 16A</td>
</tr>
</tbody>
</table>

IR camera

flash lamp

optical pulse

thermal radiation

defects
**TELOPS TESTD-LOCKT SYSTEM.**

**INCLUDES:**
- A 1.8 kW halogen lamp with reflector, overheating protection and integrated fan
- A lamp controller
- A filter set for the lamp (CFRP optimized)
- A tripod for the lamp
- An interfacing LOCK-T software socket for Reveal Lab
- A Telops IR Camera
- Reveal Lab Software

**Optional:**
- 5-m or 10-m trigger BNC cable for sync-in and sync-out to/from camera
- 1 kW spare illuminant for halogen lamp (2 required for 2 kW)
- Spare filter borosilicate glass for halogen lamp

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**TESTD-LockT Series.**

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>TESTD-LOCKT 2</th>
<th>TESTD-LOCKT 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POWER</strong></td>
<td>3.6 kW (2 × 1.8 kW)</td>
<td>3.6 kW (2 × 1.8 kW)</td>
</tr>
<tr>
<td><strong>HALOGEN LAMP</strong></td>
<td>1.8 kW</td>
<td>2 × 1.8 kW</td>
</tr>
<tr>
<td><strong>LAMP OPERATIONAL TEMPERATURE</strong></td>
<td>0 to 30°C</td>
<td>0 to 30°C</td>
</tr>
<tr>
<td><strong>OUTPUT CHANNELS</strong></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>CONTROLLER AND LAMP HOUSING MATERIAL</strong></td>
<td>Aluminum</td>
<td>Aluminum</td>
</tr>
<tr>
<td><strong>CAMERA SYNC</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>INTEGRATED SIGNAL GENERATOR</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>SUITABLE FOR CONTINUOUS OPERATION</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>CONNECTOR FOR STANDARD FLASH HEADS</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>LAMP CABLE LENGTH</strong></td>
<td>5 m</td>
<td>5 m</td>
</tr>
<tr>
<td><strong>TRIPOD BAG 120 CM</strong></td>
<td>Included</td>
<td>Included</td>
</tr>
<tr>
<td><strong>WEIGHT</strong></td>
<td>6 kg (w/o tripod)</td>
<td>10 kg (w/o tripod)</td>
</tr>
<tr>
<td><strong>FILTER SET FOR HALOGEN LAMP (CFRP OPTIMIZED)</strong></td>
<td>x1</td>
<td>x2</td>
</tr>
<tr>
<td><strong>BAR-T MOUNTING FOR 2 LAMPS</strong></td>
<td>No</td>
<td>Included</td>
</tr>
<tr>
<td><strong>POWER</strong></td>
<td>110/230 VAC Fusing 16A</td>
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</tr>
</tbody>
</table>
Telops’ FAST-IR camera line features the fastest infrared cameras available on the market. Not only do these cameras have impressive temporal resolutions, but they are also extremely sensitive, enabling the detection of challenging targets. They self-adjust to rapid temperature changes and have enhanced identification capabilities using spectral characteristics.

**REVEAL LAB.**

The Reveal Lab software is designed for active and passive thermography and shearography applications in the lab and for service inspections.

Reveal Lab provides an optimum workflow, while offering a wide range of powerful functions to record, analyze and post-process images and image sequences. They include:

- Extension toolboxes (options)
- Python script toolbox
- Automation and Quantitative Evaluation toolboxes

**REVEAL RT.**

The Reveal RT software supports Telops IR cameras. The user-friendly camera interface allows for visual configuration of the infrared camera and gives a quick overview of all relevant settings.

The advanced triggering capabilities allow for isochronal synchronized image acquisition. Analog or digital image information can be identified in the stream of images for synchronization. Multiple cameras can be synchronized.

**PICK YOUR CAMERA.**

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**MIDWAVE CAMERAS.**
- FAST M1k
- FAST M2k
- FAST M3k
- FAST M350
- FAST M200
- FAST M150
- FAST M100k

**HD MIDWAVE CAMERAS.**
- FAST M80hd
- FAST M100hd

**LONGWAVE CAMERAS.**
- FAST L200
- FAST L100k

**VERY LONGWAVE CAMERAS.**
- FAST V1k
- FAST V500
- FAST V350
- FAST V300
- FAST V100k