The new TESTD-PT system

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.

KEY BENEFITS

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 18 mK can be detected, allowing the detection of challenging targets, such as heat dissipation in electronic circuits.

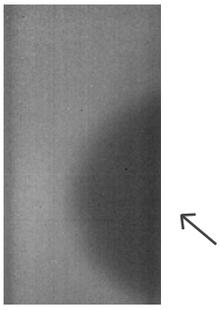
ADVANCED CALIBRATION

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.

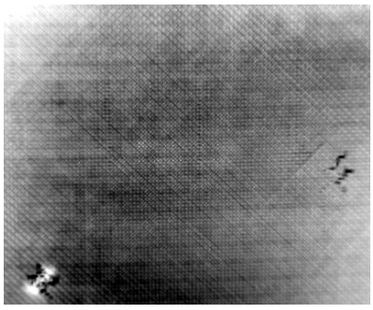
POWERFUL SOFTWARE

Straightforward, powerful post-processing software pro-vides 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.

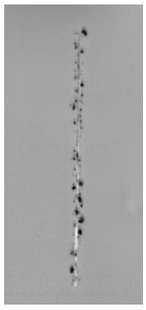
EXAMPLES OF TYPICAL USES



Carbon fiber reinforced polymer (CFRP) delamination.



Detection of impact damages in composite material.



Detection of corrosion under paint.

TELOPS TESTD-PT SYSTEM.

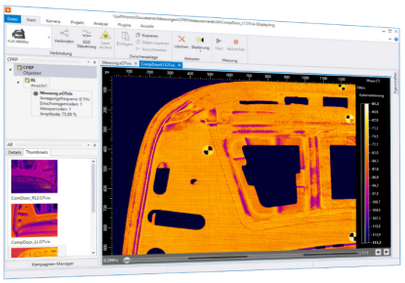
INCLUDES:

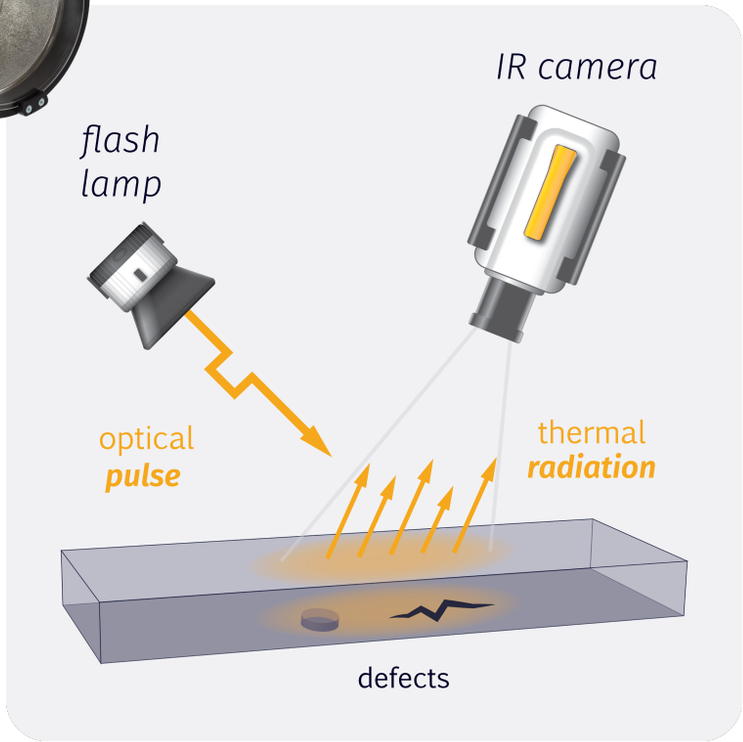
- A portable flash generator
- A flash lamp with reflector
- A filter set for the lamp
- A tripod for the lamp
- An ESG signal generator with TESTD-PT extension
- An interfacing PT software socket for Reveal Lab
- A Telops IR Camera
- Reveal Lab Software

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





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

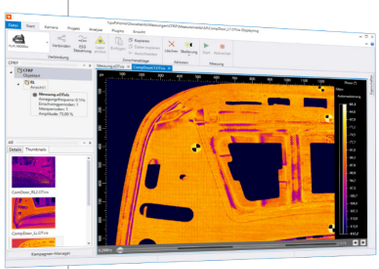
- Reveal Lab Software

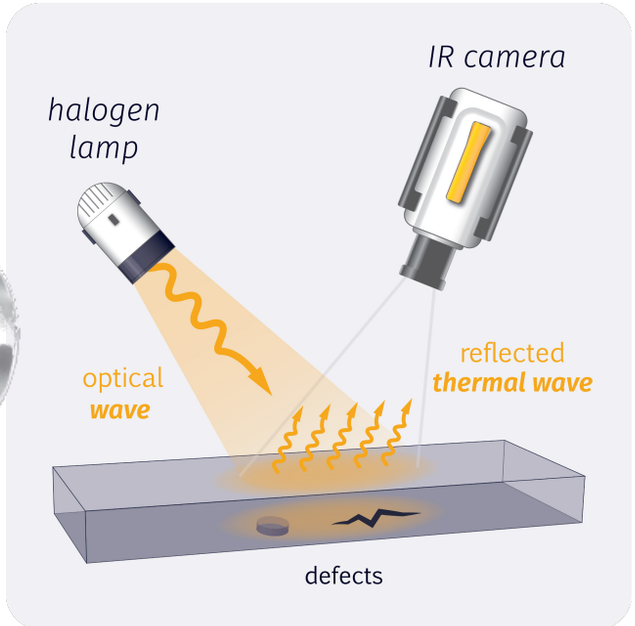
Optional: 5-m or 10-m trigger BNC cable for sync-in and sync-out to/ from camera

Optional: 1 kW spare illuminant for halogen lamp (2 required for 2 kW)

Optional: Spare filter borosilicate glass for halogen lamp

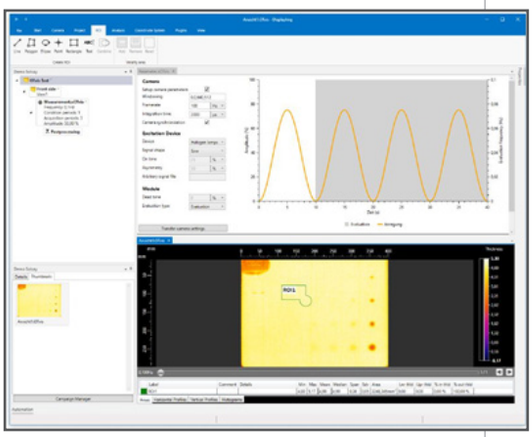
TESTD-LockT Series.		
SPECIFICATIONS	TESTD-LOCKT 2	TESTD-LOCKT 4
POWER	3.6 kW (2 × 1.8 kW)	3.6 kW (2 × 1.8 kW)
HALOGEN LAMP	1.8 kW	2 × 1.8 kW
LAMP OPERATIONAL TEMPERATURE	0 to 30°C	0 to 30°C
OUTPUT CHANNELS	2	2
CONTROLLER AND LAMP HOUSING MATERIAL	Aluminum	Aluminum
CAMERA SYNC	Yes	Yes
INTEGRATED SIGNAL GENERATOR	Yes	Yes
SUITABLE FOR CONTINUOUS OPERATION	Yes	Yes
CONNECTOR FOR STANDARD FLASH HEADS	Yes	Yes
LAMP CABLE LENGTH	5 m	5 m
TRIPOD BAG 120 CM	Included	Included
WEIGHT	6 kg (w/o tripod)	10 kg (w/o tripod)
FILTER SET FOR HALOGEN LAMP (CFRP OPTIMIZED)	×1	×2
BAR-T MOUNTING FOR 2 LAMPS	No	Included
POWER	110/230 VAC Fusing 16A	110/230 VAC Fusing 16A





THE SOFTWARE.

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.

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.

MIDWAVE CAMERAS.

- FAST M1*k*
- FAST M2*k*
- FAST M3*k*
- FAST M350
- FAST M200
- FAST M150
- FAST M100*k*

HD MIDWAVE CAMERAS.

- FAST M80*hd*
- FAST M100*hd*

LONGWAVE CAMERAS.

- FAST L200
- FAST L100*k*

VERY LONGWAVE CAMERAS.

- FAST V1*k*
- FAST V500
- FAST V350
- FAST V300
- FAST V100*k*

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