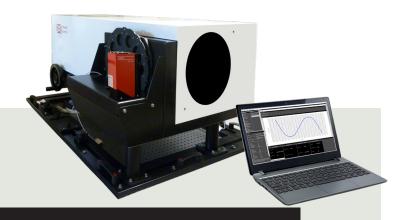


→ EO/IR Equipment Test Solution





# INFRATEST

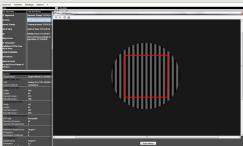
**ELECTRO-OPTICAL** 

**TEST SOFTWARE** 

#### UNIVERSAL & EASY-TO-USE TEST SOLUTION

**INFRATEST** is a powerful software for testing **IR cameras, visible and NIR cameras**, ICCDs, goggles and laser rangefinders. Based on video acquisition modules compatible with a wide range of communication protocols, including LVDS, Camera Link, GigE Vision and all types of analog formats – CCIR, PAL, RS170, NTSC, INFRATEST acquires, displays and analyzes the video signal from all types of electro-optical devices. In addition, INFRATEST manages the optical stimuli delivered to the camera through the control

of **blackbodies** and visible/NIR optical sources and their accessories (collimator, target wheel, harmonization modules, etc.). INFRATEST is able to run an exhaustive list of **test routines** for a **full characterization** of camera performances: noise tests (NETD, fixed pattern noise, temporal noise ...), spatial tests (MTF, FOV, distortion), detection/recognition/identification range tests (MRTD, MDTD, TOD), alignment and harmonization tests...



Test results are exported through different formats (.csv, .xml, .png, .html). Combined with HGH's high-end blackbodies, IRCOLs target projectors, it becomes the reference testing solution for the E/O industry.

→ MTF Test Setup

→ INFRATEST EO/IR Test Software

#### > VERSATILE TEST SETUP FOR A COMPLETE CHARACTERISATION OF EO/IR DEVICES



## **INFRATEST**

**ELECTRO-OPTICAL** 

**TEST SOFTWARE** 

→ Distortion Test Results

FEATUR	ES >	INFRATEST-IR	INFRATEST-IR Premium	INFRATEST-VIS	INFRATEST-LAS
	Temporal Noise			<b>Ø</b>	
Test with Full & Uniform Illumination of Pupil and Field Necessary Accessory: Extended area Source	Noise Tests package including: Temporal Noise, 3D Noise, Power Spectral Density of Noise (Temporal & Spatial NPSD), Fixed Pattern Noise (FPN), Signal transfer function (SITF)	8	8		
	Thermal resolution package including: NETD, Noise Equivalent Power, Irradiance and Radiance (NEP, NEI, NER), 3D NETD, signal to noise ratio (SNR), Detectivity (D*)	<b>⊗</b>	<b>⊗</b>		
	Correction of the non-uniformity (NUC)		8		
	Detection and correction of Bad Pixels		8		
Spatial Tests	Line Spread Function (LSF)	<b>Ø</b>	8		
	Modulation Transfer Function (MTF)	8	<b>Ø</b>	<b>Ø</b>	
Necessary accessories: Source & Targets	Field of View (FOV)		8	8	
	Distortion		<b>⊗</b>	<b>Ø</b>	
Optional accessory: Collimator	Alignment of optical axis Vs. mechanical axis		8	8	
	Effective focal length (magnification)		8		
Range Tests Necessary Accessories: Source & Targets Optional accessory: Collimator	Minimum Resolvable Temperature Difference (subjective and objective MRTD)	<b>Ø</b>	8		
	Detection, Recognition and Identification Ranges		8		
	Minimum Detectable Temperature Difference (MDTD)		<b>Ø</b>		
	Triangle Orientation Discrimination (TOD)		⊗		
Visible Tests Necessary accessories: Visible Source & Targets	Gain			<b>Ø</b>	
	Spatial Resolution			<b>⊗</b>	
	Infinity Focus			<b>Ø</b>	
	Dynamic Range			<b>⊗</b>	
	Zero and Focus of Eyepiece			<u>Ø</u>	
	Parallelism of the two Optical Axes of Goggles			8	
	Detection of Spot Defects			8	C4
Laser Rangefinder Tests	Laser Energy				<b>⊗</b>
	Beam Divergence				<b>Ø</b>
Necessary accessories: Laser Sensors	Accuracy of Distance Measurement				⊗
	Alignment of Transmitter and Receiver Axis Vs.Optical (Visible or IR) Axis				$\otimes$

### A UNIQUE TRAINING OFFER: Keep up to date with the latest software innovations!



Every year, at least one new version of the **Infratest software** is released, extending and improving its testing capabilities thanks to the most efficient algorithms, while constantly seeking improved ergonomics. We offer a yearly training aiming at optimizing the use of the Infratest Software in order for the operators to collect **the most accurate data** on the tested equipment. This **one-day personalized training**, held in the customers' facilities, is provided by an HGH engineer specialized in electro-optical systems' design, development and testing methods.

Above information is subject to changes without notice



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