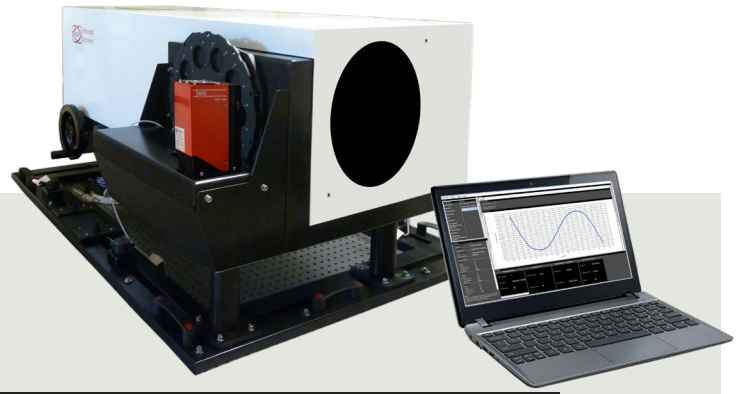




INFRATEST

→ EO/IR Equipment Test Solution



INFRATEST

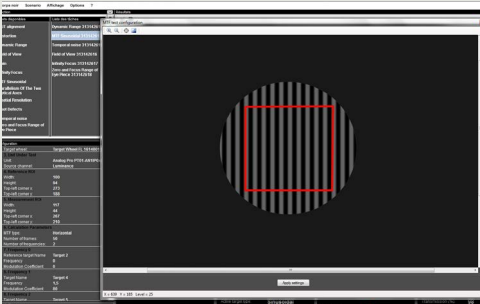


ELECTRO-OPTICAL

TEST SOFTWARE

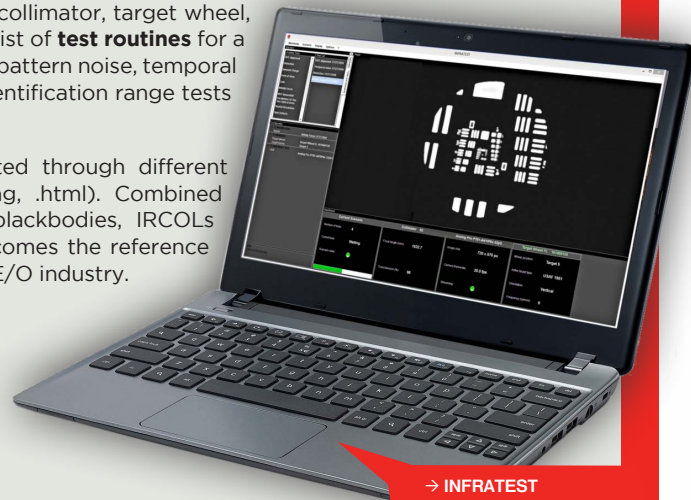
▶ UNIVERSAL & EASY-TO-USE TEST SOLUTION

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...



→ MTF Test Setup

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.



→ INFRATEST
EO/IR Test Software

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

INFRATEST enables to set up multiple optical tests by a click, controlling external reference sources and acquiring camera video signal through standard communication protocols.



→ Reference Sources & Accessories



→ Cameras under Test

Optical Stimuli Management



LVDS, GigE, CCIR ...
Signal Acquisition

NETD, MTF ...
Results Export

.csv
.xml
.png
.html





→ Distortion Test Results



INFRATEST

ELECTRO-OPTICAL

TEST SOFTWARE

FEATURES

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

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



www.hgh-infrared.com

<p>Headquarters HGH SYSTEMES INFRAROUGES 10 rue Maryse Bastié 91430 Igny, France Phone: +33 1 69 35 47 70 Fax: +33 1 69 35 47 80 Email: sales@hgh.fr</p>	<p>US Office ELECTRO OPTICAL INDUSTRIES 320 Storke Rd., Ste. 100 Goleta, CA 93117, USA Phone: 805.964.6701 Fax: 805.967.8590 Email: sales@electro-optical.com</p>	<p>Asia Office ASIA INFRARED SYSTEMS 541 Orchard Rd., #09-01 Liat Towers Singapore 238881 Phone: +65 6933 1394 Email: sales@hgh-infrared.com</p>
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