



DISPLAYING SOFTWARE

Modular software platform for thermography and automated inspection



DISPLAYIMG SOFTWARE

Modular software platform for thermography and automated inspection



One platform for measurement, analysis and automation.

DisplayImg is the central software platform for edevis thermography systems. It combines cameras and excitation modules in a unified environment and supports acquisition, visualization and evaluation of thermographic inspection data – from basic laboratory applications to fully automated serial inspection.

Depending on the application, three main software levels are available: DisplayImg Elements for basic inspection and analysis tasks, DisplayImg Professional for advanced measurements and flexible evaluation, and DisplayImg Automation for automated inline inspection processes. In addition, specialized software solutions such as TSAvis for thermal stress analysis and QTvis for continuous temperature monitoring are available. The modular architecture can also be extended with dedicated toolboxes, interfaces and customized functions.

For more information about DisplayImg and the latest software downloads, visit the edevis website and [software download area](#).

YOUR ADVANTAGES AT A GLANCE

Unified software platform: Control of camera, excitation source, data acquisition and evaluation within one environment

Flexible software levels: Elements, Professional and Automation cover laboratory, development and automated serial inspection

Broad method support: Suitable for active and passive thermography as well as specialized inspection methods

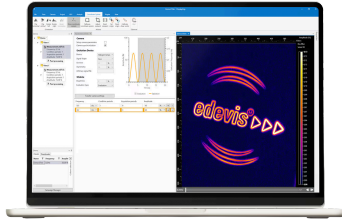
Modular expansion: Toolboxes, Python scripting and customized modules enable adaptation to individual inspection tasks

Structured data management: Campaign, project and database functions support reproducible workflows and large data volumes

Ready for automation: OPC, digital I/O, SQL connectivity and barcode/DMC integration support industrial processes

DISPLAYIMG 7 PROFESSIONAL

Powerful software for advanced thermography inspection



Acquire, analyze and adapt inspection data with maximum flexibility. DisplayImg 7 Professional is the comprehensive software solution for complex inspection tasks in active and passive thermography as well as shearography. It combines camera control, excitation sources, data acquisition and evaluation within a unified user interface.

Advanced analysis functions, structured data management and a flexible project tree support extensive inspection campaigns and large data volumes. Python scripting, dedicated toolboxes and additional modules allow DisplayImg 7 Professional to be tailored to individual applications and inspection workflows.

YOUR ADVANTAGES AT A GLANCE

Comprehensive system support: Control of infrared cameras and edavis excitation sources such as induction, laser, halogen and flash

Advanced data analysis: Extensive image processing, visualization and evaluation functions for demanding inspection tasks

Structured data management: Campaign manager and project tree support complex measurement series and large data volumes

Flexible expansion: Python scripting and modular toolboxes enable customized functions and inspection workflows

Broad method support: Suitable for active and passive thermography as well as active shearography

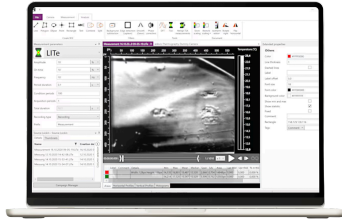
Customizable workflows: Expansion modules and interfaces support integration of specialized analysis and automation functions

TECHNICAL INFORMATION

SOFTWARE:	DisplayImg 7 Professional
SUPPORTED METHODS:	— Active thermography — Passive thermography — Active shearography
EXCITATION SOURCES:	Induction, laser, optical excitation, flash and other edevis modules
DATA PROCESSING:	Real-time processing and storage of image data
ANALYSIS:	— Image processing filters — Statistical analysis — Phase and Fourier evaluation — Advanced visualization
DATA MANAGEMENT:	Campaign manager and expandable project tree
SCRIPTING:	Python
TOOLBOXES:	— Automation IO — Crack Detection
CAMERA COMPATIBILITY:	FLIR, InfraTec ImageIR, IRCAM, Telops, Xenics, DeviceAlab, Noxant and others
SHEAROGRAPHY:	Support for isi-sys shearography sensors
OPERATING SYSTEM:	Windows 10 or 11, 64 bit
MEMORY:	Min. 8 GB, 16 GB recommended
PROCESSOR:	Min. Intel Core i5, Intel Core i7 recommended
GRAPHICS:	Intel onboard or dedicated NVIDIA/AMD graphics

DISPLAYIMG 7 ELEMENTS

Intuitive software for getting started with active thermography



Acquire, evaluate and document thermographic inspections with ease. DisplayImg 7 Elements is the compact software solution for basic inspection tasks in active and passive thermography. Its clear user interface supports a quick start and is particularly suited for laboratory use, education and standardized inspection tasks.

In addition to live imaging, data acquisition and graphical evaluation, the software provides basic analysis and filtering functions as well as a campaign manager for structured measurement data management. Dedicated OTvis and TSAvis versions allow the software to be tailored to optical lock-in thermography or thermal stress analysis.

YOUR ADVANTAGES AT A GLANCE

Easy to get started: Intuitive user interface supports a fast and straightforward workflow

Active and passive thermography: Supports pulse, lock-in and passive measurement methods

Structured data evaluation: Graphical analysis, statistical functions and basic image processing support result assessment

Clear data management: Campaign manager enables structured organization of measurement series

Broad hardware support: Compatible with various infrared cameras and edevis excitation modules

Specialized versions: OTvis and TSAvis enable adaptation to optical lock-in thermography and thermal stress analysis

TECHNICAL INFORMATION

SOFTWARE:	DisplayImg 7 Elements
SUPPORTED METHODS:	— Active thermography — Passive thermography — Pulse thermography — Lock-in thermography
VERSIONS:	— OTvis — TSAvis
EXCITATION SOURCES:	Induction, laser, halogen, flash and other edevis modules
DATA ANALYSIS:	Graphical evaluation, statistical analysis and basic filter functions
DATA MANAGEMENT:	Campaign manager
CAMERA COMPATIBILITY:	FLIR, InfraTec ImageIR, IRCAM, Telops, Noxant and others
OPERATING SYSTEM:	Windows 10 or 11, 64 bit
MEMORY:	Min. 8 GB, 16 GB recommended
PROCESSOR:	Min. Intel Core i5, Intel Core i7 recommended
GRAPHICS:	Intel onboard or dedicated NVIDIA/AMD graphics

DISPLAYIMG 7 AUTOMATION

Software for fully automated thermographic inline inspection



Automate inspection processes, evaluate results directly and integrate data seamlessly. DisplayImg 7 Automation is a modular software solution for automated non-destructive inspection processes. It controls data acquisition, evaluation and result processing directly within the production cycle and can be adapted to different inspection workflows.

OPC UA/DA, digital I/O, SQL database connectivity and barcode/DMC integration support seamless integration into existing production environments. Automated evaluation, role-based operating concepts and optional machine-learning functions enable reproducible inspection workflows from data acquisition to OK/NOK classification.

YOUR ADVANTAGES AT A GLANCE

Fully automated inspection: Data acquisition, analysis and result evaluation are integrated directly into the production process

High repeatability: Standardized inspection sequences support reproducible results in serial production

Flexible system integration: OPC UA/DA, digital I/O and axis control support connection to PLCs, machines and handling systems

Integrated data management: Inspection results can be stored and processed in local or central SQL databases

Automatic component identification: Barcode and Data Matrix Code recognition links inspection results to the corresponding component

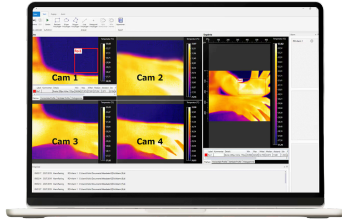
Modular expansion: Crack Detection, Automation IO and customized modules enable adaptation to individual inspection tasks

TECHNICAL INFORMATION

SOFTWARE:	DisplayImg 7 Automation
APPLICATION:	Automated inline and serial inspection
DATA ACQUISITION:	Fully automated
EVALUATION:	Real-time capable, optional machine-learning support
INTERFACES:	OPC UA/DA, digital I/O
DATABASES:	Local or central SQL databases
IDENTIFICATION:	Barcode and Data Matrix Code recognition
AXIS CONTROL:	Support for external axis systems, e.g. edevis EDE3AC or Festo CMMO
USER CONCEPT:	Operator mode and expert access for administrators
TOOLBOXES:	— Crack Detection — Automation IO — Customized modules
HARDWARE COMPATIBILITY:	Cameras and excitation modules supported by DisplayImg Professional
OPERATING SYSTEM:	Windows 10 or 11, 64 bit
MEMORY:	Min. 16 GB
PROCESSOR:	Min. Intel Core i5, Intel Core i7 recommended
GRAPHICS:	High-performance integrated or dedicated NVIDIA/AMD graphics

DISPLAYIMG 7 QTVIS

Software for continuous temperature monitoring in industrial processes



Detect temperature deviations early and monitor processes reliably. Displayimg 7 QTvis is a specialized software solution for continuous thermographic temperature monitoring. Temperature values and trends are captured in real time and clearly visualized. Freely configurable thresholds allow critical temperature deviations to be detected immediately and corresponding alarm or switching signals to be triggered.

With 24 V I/O and optional Industrial Ethernet, QTvis can be integrated into existing control and safety concepts. In addition to continuous process monitoring, the software supports long-term measurements with continuous data logging – for example in temperature-critical production processes, equipment or materials.

YOUR ADVANTAGES AT A GLANCE

Real-time temperature monitoring: Temperature values and trends are continuously acquired and clearly visualized

Flexible threshold monitoring: Configurable temperature limits enable automatic alarm and switching responses

Enhanced process safety: Critical overtemperature conditions can be detected and connected control systems can trigger process shutdowns

Long-term monitoring: Continuous data logging supports analysis of temperature developments over extended periods

Easy operation: Intuitive, password-protected user interface enables fast setup and configuration

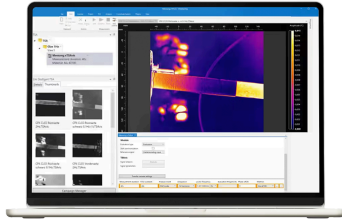
Flexible process integration: 24 V I/O and optional PLC communication via Industrial Ethernet support integration into industrial systems

TECHNICAL INFORMATION

SOFTWARE:	DisplayImg 7 QTvis
FUNCTION:	Continuous temperature monitoring
MONITORING:	Real-time with configurable temperature thresholds
ALARM FUNCTIONS:	Threshold alarms and switching signal output
DATA LOGGING:	Long-term monitoring with continuous recording
VISUALIZATION:	Temperature trends displayed in diagrams
USER INTERFACE:	Password-protected
CAMERA COMPATIBILITY:	— FLIR A-Series, uncooled — FLIR X-Series, cooled (optional)
INTERFACES:	— 24 V I/O — Industrial Ethernet for PLC communication (optional)
OPERATING SYSTEM:	Windows 10 or 11, 64 bit
MEMORY:	Min. 8 GB, 16 GB recommended
PROCESSOR:	Min. Intel Core i5, Intel Core i7 recommended
GRAPHICS:	Intel onboard or dedicated NVIDIA/AMD graphics

DISPLAYIMG 7 TSAVIS

Software for thermal stress analysis using lock-in thermography



Visualize stress distributions and dissipation processes without contact. Displayimg 7 TSAvis is a specialized software module for thermal stress analysis (TSA) under dynamic loading. The software evaluates minute temperature-related signal changes synchronously with the external load, enabling visualization of stress distributions, local stress concentrations and dissipative processes within the material.

In addition to real-time lock-in analysis, TSAvis supports multi-harmonic evaluation, ROI statistics, profiles and isotherms. Typical applications range from crack initiation and propagation analysis to adhesive and joint inspection, composite material evaluation and validation of numerical simulation results.

YOUR ADVANTAGES AT A GLANCE

Non-contact stress analysis: Thermally induced signal changes reveal stress distributions under dynamic loading

Real-time lock-in evaluation: Measurement data is acquired synchronously with the load source and analyzed directly

Multi-harmonic analysis: Evaluation up to the 4th harmonic supports detailed investigation of complex loading conditions

Comprehensive image analysis: Isotherms, histograms, profiles and ROI statistics enable targeted evaluation of measurement data

Flexible camera support: Compatible with various cooled and uncooled infrared cameras

Fully documented measurements: Lossless video recording and metadata support evaluation, comparison and archiving

TECHNICAL INFORMATION

SOFTWARE:	DisplayImg 7 TSAvis Elements
METHOD:	Thermal stress analysis (TSA) using lock-in thermography
EVALUATION:	Stress and dissipation analysis
HARMONIC ANALYSIS:	Up to 4th harmonic
ANALYSIS FUNCTIONS:	Isotherms, histograms, profiles and ROI statistics
SYNCHRONIZATION:	Analog lock-in interfaces to external load source
DEVICE CONTROL:	Camera and ESG signal generator
VIDEO RECORDING:	Lossless with metadata storage
CAMERA COMPATIBILITY:	FLIR SC5000 / SC7000 / X-Series / A-Series, IRCAM, Telops, Noxant NoxCAM
OPERATING SYSTEM:	Windows 7 / 8 / 10, 64 bit
PROCESSOR:	Intel Core i5 or i7 with SSE4
MEMORY:	Min. 8 GB

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The FOERSTER Group is represented by subsidiaries and representatives in over 60 countries worldwide. You can find a complete overview on our website.

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