FLIR RESEARCH STUDIO
Analysis Software

FLIR Research Studio provides robust yet easy-to-use recording and analysis capabilities for a variety of research & development applications. This premium thermal analysis software offers a simplified workflow for viewing, recording, and analyzing FLIR camera data – allowing users to quickly interpret and understand critical information.

With advanced thermal analytic capabilities and recordings control, researchers can capture precise thermal data that can be quickly shared with colleagues in standard file formats. Research Studio also offers multi-language and multi-platform support (Windows, MacOS, Linux) to improve collaboration between team members, increase efficiency, and help reduce the potential for misinterpretation.

www.flir.com/research-studio

SIMPLE TO USE

Increase efficiency and reduce testing cycles with this streamlined, intuitive software

- Quickly interpret and understand critical thermal measurement data with the easy Connect -> View -> Record -> Analyze -> Share workflow
- Compare thermal data between multiple connected cameras and recorded data files simultaneously to provide instant feedback on thermal anomalies, reducing the need for multiple repetitive tests
- Easily navigate the user interface with large, familiar icons that are touchscreen friendly

ADVANCED THERMAL ANALYSIS

Acquire meaningful data with advanced recording and analysis features

- Fully analyze thermal data in unique and meaningful ways using multiple region-of-interest types, data plotting options, and customizable workspaces
- Quickly highlight important thermal trends and potential problems using the sophisticated image filters, multiple palette selections, and isotherms
- Optimize your workflow for unique thermal test captures with custom user calibration support and measurement functions

SHARE RESULTS EASILY

Make it simple to collaborate with team members

- Increase efficiency and reduce the potential for misinterpretation by sharing important thermal data quickly and easily with colleagues across multiple operating systems and languages
- Export data into commonly used file and image formats, or enhance collaboration by sharing crucial thermal analysis work using Research Studio Player files
- Trim recorded data files to highlight only the most important information

For more information contact: Sales@TeledyneFLIR.com
or to find your local support number, visit: flir.com/contactsupport

www.teledyneflir.com

SPECIFICATIONS

CONNECTION

	Standard Edition	Professional Edition	Research Studio Player
Supported Cameras	Ax5, A6xxx, A8xxx, A8580 Series, A6780 Series, A400/A500/A700 Series *, A50/A70 Series *, A300/A600, X Series **, RS8500 Series (RS6700, RS6800, RS8200, RS8300), SC6x00/SC8x00 Series, ETS320 **, C Series * **, E Series **, T Series **, GF/GFx series **		× - Live streaming not supported
Supported Camera Interfaces	USB, GigE, Camera Link, CXP, RTSP		× - Live streaming not supported
Supported Frame Grabbers	Camera Link (Eurosys/Dalsa), CXP (Eurosys/Dalsa)		× - Live streaming not supported
High Speed Data Recorder Support	×	✔	× - Live streaming not supported
Supported Operating Systems	Windows 10 (64-bit) or newer, Linux, Ubuntu 20.04 or newer, Fedora 34 or newer, MacOS 10.14 Mojave or newer		
Languages	Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish		

Note* Only models that support radiometric streaming will connect to Research Studio.
Note** USB connection and Streaming not supported on MacOS 11 Big Sur or newer. This includes direct movie viewing from SSD on X-series cameras.

VIEWING

	Standard Edition	Professional Edition	Research Studio Player
Customizable Workspaces	Open multiple files, streams, and customize a saveable view		Open multiple .FRS data files and customize a saveable view
Image Display (Camera Dependent)	IR, visible, MSX		× - Live streaming not supported
Recallable Workspaces	Quickly recall custom workspaces		Quickly recall custom workspaces (Only .FRS files)
Pop-Out Camera Controller	✔	✔	×
Multiple Camera Connection Support	Unlimited # limited by computer hardware		× - Live streaming not supported
Image Zoom/Rotation/Enhancement Tools	✔	✔	✔
Level/Span Control	✔	✔	✔
Unit Selection	Recording/Camera Dependent: Celsius, Fahrenheit, Kelvin, Rankin, Counts, Radiance		
Hotkeys	User customizable		

ANALYSIS

	Standard Edition	Professional Edition	Research Studio Player
Region of Interest Types	Spot, box, line (simple), ellipse, delta	Spot, box, line (simple), line (multi-segment), ellipse, delta	
Region of Interest Options	ROI rotation, on-image statistics, ROI naming, colors, configuration		
Speciality ROIs	None	Isotherms, segmentation	
Measurement Functions	×	✔	×
User Calibrations	×	✔	×
User Non-Uniformity Corrections (PC-Side)	×	✔	×
Filters	Image subtraction, sliding subtraction	Image subtraction, sliding subtraction, image averaging, peak temp hold, HSM, others	
Statistics Plots (Unlimited)	Customizable statistics table: min, max, mean, STD, others		
Plot Types	Image metadata, temporal plot, line profile, cursor, image information		
Versatility	Stats analysis across multiple videos, images, and camera streams		Stats analysis across multiple videos, images
Color Palettes	21 available assets organized into categories, recently used, and live preview		
Automatic Gain Correction ROI	✔	✔	✔
Spatial Calibrations	Auto spatial calibration (camera dependent)	Auto (camera dependent) and manual spatial calibration	Auto and manual spatial calibration
Emissivity Corrections (Full Image & Per ROI)	✔	✔	✔

RECORD

	Standard Edition	Professional Edition	Research Studio Player
Record To Computer Hard Drive	Start/stop, number frames, duration	Start/stop, number frames, duration	× - Recording not supported
Record To Computer RAM	×	Number frames, duration	× - Recording not supported
Record To High Speed Data Recorder	×	✔	× - Recording not supported
Record To Camera RAM (Only X-Series)	✔	✔	× - Recording not supported
Record Triggering	Header based trigger, serial trigger (via USB converter)	Header based trigger, serial trigger (via USB converter), pre-trigger, post-trigger, record start/stop	× - Recording not supported
Record Dashboard	✔	✔	× - Recording not supported
Periodic Recording	×	✔	× - Recording not supported
Lockin Signal Support	✔	✔	× - Recording not supported
Display Images While Recording	✔	✔	× - Recording not supported

SHARE

	Standard Edition	Professional Edition	Research Studio Player
Movie Files	MP4, WebM, TIFF, TIFF (32-bit floating point), AVI		×
Single Image Files	JPEG, RJPEG (Radiometric), PNG, TIFF, TIFF (32-bit floating point), CSV		×
Plots	PNG	CSV, PNG	×
.FRS (To Player App)	×	✔	Read Only
Radiometric File Types	RJPEG, SEQ, ATS, PTW, SFMOV (read only), FRS (read only)		.FRS files only
Save ROI/Object Parameters Into File	✔	✔	×
File Extraction/Trimming (Based On Playbounds)	×	✔	×

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