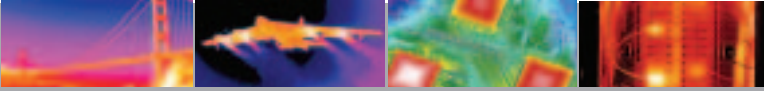




The Global Leader in Infrared Cameras

ThermaCAM[®] RTools / HSDR

HIGH-SPEED DATA RECORDER



A high-speed, large volume data recorder coupled with a highly sophisticated software package – offering the most technically advanced solution for thermal imaging capture and storage for the scientific community.



- > High-Speed Recording at 100 MB/second
- > 1 Hour Recording at Maximum Frame Rate
- > Gigabit Ethernet LAN Compatible
- > Remote Start Capability
- > No Dropped Frames at Max Rate & Sequence Length
- > Simultaneous Real-time Image Display/max Frame Rate Capture
- > All Removable Hard Drives for Secure Applications
- > Standard 19 in Rack Mount Form Factor

The ThermaCAM RTools High Speed Data Recorder (HSDR), Raises the Bar on IR Data Recording Performance.

Traditionally infrared imaging data recorders were limiting in their performance. You could either record fast frame rates over a short time period (burst recording), or record slow frame rates over a long time period (time lapse recording). The Rtools HSDR solves these performance issues by allowing fast frame rate data recording over extended time periods. The system is compact in size and incorporates the latest connectivity protocol. Coupled with the ThermaCAM Rtools software package, the HSDR system is truly a one of a kind solution.

High-speed, Large Volume Recording

The ThermaCAM High-Speed Digital Recorder (HSDR) is a digital recording system designed to collect, record, display, calibrate, and analyze images from FLIR Systems infrared cameras utilizing the ThermaCAM RTools Radiometric Software Suite. The HSDR can record Parallel LVDS or Camera Link Base image data at 62.5 megabytes per second to removable nonvolatile storage for up to 1 hour. The system features real time image display while recording at maximum frame rates. Gigabit Ethernet (GigE) is also available for networking or image acquisition/control from GigE-based FLIR cameras.

Sophisticated Software Suite

The ThermaCAM RTools Software Suite is comprised of several modules for data acquisition, infrared camera calibration, file archival and maintenance, and data review and analysis – all integrated with the High-Speed Digital Recorder to provide a robust solution for the scientific and engineering community.

High-Speed Digital Recorder Specifications	
Form Factor	19 inch Rack Mount
Display	17 inch LCD / Rack mount
Peripherals	Keyboard with touchpad in rack mount drawer
Digital Data Transfer	Camera Link Base Parallel LVDS Gigabit Ethernet
Command and Control	Camera Link Base Gigabit Ethernet Serial
Time Stamp	IRIG B
Data Acquisition package	ThermaCAM RTools with enhanced RDac

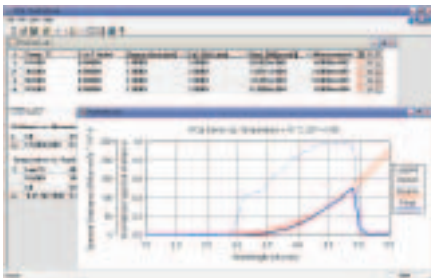


RDac™

RDac™

RDac™ is a real-time data acquisition program developed to communicate with and acquire data from numerous off-the-shelf and custom radiometric instruments. The module is designed for ease-of-use while providing real-time data capture, viewing, analysis, and storage.

- Real-time radiometric output: radiance, radiant intensity, temperature, target length/area, and more
- Multiple color tables (grayscale default) with real-time image scale control
- Compatible with many infrared imagers: FLIR SC6000, Phoenix, Merlin, and imagers with RS-422, LVDS, or TTL outputs
- Integrated IRIG-B timestamp capability
- Embedded spatial and spectral radiometric calibration support
- FLIR Phoenix two and four channel Preset/Superframe support
- SAF file format compatibility



RCal™

RCal™

RCal™ is a standalone tool that works in conjunction with the RDac™ module and the SAF data file format to radiometrically calibrate all types of banded instrumentation.

- Calibrates IR banded instrumentation in terms of radiance, irradiance, and temperature
- Multi-order calibration
- Allows the use of different transmission and/or emissivity curves or constants for each calibration data point
- Tophat or actual instrumentation spectral responses
- Automatically provides calibration coefficients for SAF data files
- Uses ModTran output files to incorporate atmospheric effects
- Provides the necessary radiometric data needed to set instrumentation sensitivity and spectral range

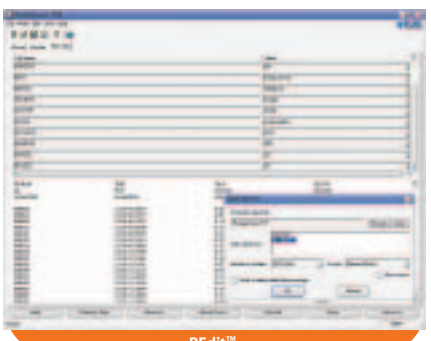


RView™

RView™

RView™ is an easy-to-use, high performance, radiometric data viewing and analysis module that is compatible with IR imager and hyperspectral imager SAF file formats.

- Data types: raw, radiance, irradiance, intensity, and temperature with adjustable emissivity
- Output file formats: text, avi, mpg, bmp
- Movie Player (forward, reverse, adjustable speed)
- Hyperspectral data cube support (spatial, spectral, and time)
- Multiple color tables (grayscale default) with real-time image scale control
- Multiple region-of-interests: box, circle, freeform, and line
- Statistical ROI, Contours, Line Profiles, Histograms
- Radiometric calculator using ROIs, constants and trig functions as variables
- Image segmentation
- Voxel plots (stats vs. time or wavelength)
- 3D viewer
- Script creator to minimize data reduction and analysis time



REdit™

REdit™

REdit™ is a utility to provide the RTools™ user with a quick and convenient way to edit the header/footer of Standard Archive Format (SAF) data files. The editor provides the user with both individual and batch mode capability to modify header data on one or numerous files during a single session.



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www.flirthermography.com/hsdrdata

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