IR FLEX CAM®
R2

PORTABLE INFRARED CAMERA WITH SMARTVIEW™

FULL TEMPERATURE MEASUREMENT

The **IR FlexCam® R2,** configured specifically for the building sciences industry, is an extremely affordable and easy to use portable, video rate infrared imaging camera that provides precision temperature measurements. The **Sharper Simpler Smarter™** design features make it an ideal camera for fast and easy infrared inspection.

MADE IN THE USA

+ SHARPER
+ SIMPLER
+ SMARTER

SHARPER

- 5" high-resolution, sunlight readable color LCD
- Highly sensitive detector produces exceptionally clear and crisp video images
- Eight different color palettes enhance versatility of the image on the large display
- 180-degree articulating lens joint
- Image Enhancement Package
- Visible color alarms
- Interchangeable lenses

SIMPLER

- Exceptionally easy to use
- Intuitive operation with on-camera Windows® CE interface
- Easy to navigate menu structure
- Mouse-pointer with left and right mouse button allows for user familiarity
- On screen annotations
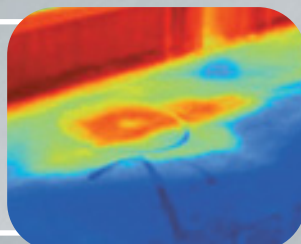- **New** SmartView professional analysis and report writing software (at no additional cost)

SMARTER

- Temperature range from -20ºC to 100ºC (-4ºF to 212ºF)
- Freeze, Save, Open and Delete images on-camera
- Programmable buttons allow for access to frequently used commands
- Ergonomically efficient design facilitates scanning of awkwardly positioned targets and reduces user fatigue
- Battery charge capacity gauge
- User specified shutdown and sleep modes increase battery and camera life

APPLICATIONS

Energy Audits

Perform infrared energy audits for residential and commercial applications. Increase the thermal efficiency of a home or building by scanning for thermal heat loss, moisture invasion, concrete integrity and heat ventilation problems.
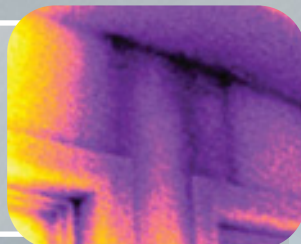
MISSING INSULATION

Roofing Survey

Detect water-saturated insulation in flat-roof systems quickly and efficiently. Find damaged portions of the roofing structure so that they can be repaired or replaced before the entire roof is contaminated.

MOISTURE DAMAGE
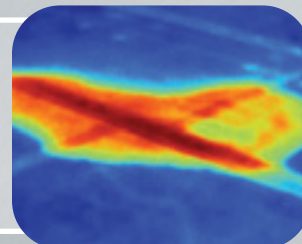
Moisture/Restoration

Accurately detect and prove moisture issues located behind interior walls, in ceilings or under carpet-covered floors have been completely resolved.

WALL MOISTURE

Mold Remediation

Control mold by detecting unknown sources of moisture that would otherwise go undetected. Infrared scanning is the only way to provide 100% moisture detection coverage.

CEILING MOISTURE

Infrared Solutions, Inc.

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PLYMOUTH MN 55447 USA
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WWW.INFRAREDSOLUTIONS.COM

INSPECTORTOOLS
INNOVATIVE SOLUTIONS FOR TODAY'S INSPECTOR

IR FlexCam® R2 Portable Infrared System Specifications

Imaging Performance

Detector	Focal Plane Array (FPA), Vanadium Oxide (VO_X) Uncooled Microbolometer
Spectral Band	8μm to 14μm
Thermal Sensitivity @ 30Hz	≤ 0.070ºC at 30ºC
Focusing	Single Finger Manual Focus
Electronic Zoom	2X
Digital Image Enhancement	Automatic Full-time Enhanced

Display and Image Storage

Digital Display	5" high-resolution, 320 x 240, sunlight readable color LCD
On-screen Indicators	Indicate status of battery, target emissivity. background temp and real-time clock
Palettes	8 unique palettes available
Storage Medium	Compact Flash Card
Camera File Format	14 bit measurement is2 data file
Set-up Controls	Date/time, Temperature units C/F, Language, Scale, LCD intensity (high/normal/low)
Image Controls	One button Level, Span, Auto Adjust (continuous/manual)
Text Annotation of Images	User definable, automatically included in reports
Programmable Image Capture	Program camera to automatically capture thermal images

Temperature Measurement

Calibrated Temperature Range	-20°C to 100°C (-4°F to 212°F)
Accuracy	±2°C or ±2%
Measurement Modes	Movable point, centerpoint, center box (area min/max, average), automatic hot and cold point detection, isotherm, color alarm above and below.
Emissivity/Background Correction	Based on user input.

Standard Optics

20mm f/0.8 Germanium	Field of view: 23° Horizontal x 17° Vertical (optional lenses available)
Spatial Resolution (IFOV)	2.6 mrad IFOV, 0.15m minimum focus

Power

Battery Type	Li-Ion Smart Battery, rechargeable, field-replaceable
Battery Operating Time	3 hours continuous operation
Battery Charging	2 bay intelligent charger powered via AC outlet or 12v from car (optional)
Power Saving	Automatic shutdown and sleep modes (user specified)

Interfaces

Video Output	RS170 EIA/NTSC or CCIR/PAL composite video

Physical Characteristics

Weight	1.95kg (4.3lbs) including battery
Size	69mm x 262mm x 162mm (2.75" x 10.5" x 6.5") camera only
Tripod Mounting	1/4" – 20 UNC

Environmental

Operating Temperature	-10ºC to +50ºC (14ºF to 122ºF)
Storage Temperature	-40ºC to +70ºC (-40ºF to 158ºF)
Humidity	Operating and storage 10% to 95%, non-condensing
Shock / Vibration	25G, IEC 68-2-29 / 3G, IEC 68-2-6
Encapsulation	IP54, IEC 60529
Transit Drop	MIL-STD-810F, Method 516.5, Procedure IV
Agency Approvals	CE Approved (EN61326 Standard)

Warranty

Term	12-month warranty included; extended options available

Standard Equipment

IR Camera with 20mm f/0.8 lens	SmartView™ Software	Heavy Duty Carrying Case	Operation Manual
Compact Flash Card	Shoulder Strap	Battery Charger	Video Cable
USB Card Reader	2 Rechargeable Batteries		PCMCIA Adapter

Optional Equipment

	10.5 mm Lens (42°H x 32°V), 4.9 mrad IFOV, 0.3m min Focus	12v Power Cable Car Charger	Laser Pointer
		120v AC Adapter	Extra Batteries
			Sun Shield