# Irisys
# Thermal Imaging
## Red Hot Intelligence

# IRI 2010 Thermal Camera

# LOW COST - Without Compromise!

The Irisys thermal camera is a low cost camera which is used to find faults and identify failing components.

**Key Camera Features**

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- ## Image Fusion

  Lets you view a visible or thermal image of your equipment, or a blend of both. By combining visible and thermal images the user is able to get a clear image of the equipment being monitored whilst easily seeing potential faults.

- ## Hot/Cold Tracking

  By switching on the tracking function two cursors can be activated to simultaneously find the hottest and coldest points in the image. This function is particularly useful for quick fault finding and takes away any guess work.

- ## Audible and Visual Alarms

  The Audible and Visual alarm function can be switched on to quickly alert the user to temperatures outside a defined range. This works particularly well when combined with the tracking and fusion functions. A user can very quickly scan equipment, allowing the camera to automatically sound and show an alarm, when equipment is operating outside its defined temperature parameters. With the camera set in Image Fusion (blended) mode or even in full visible mode a user can very quickly pin point any alarm locations.
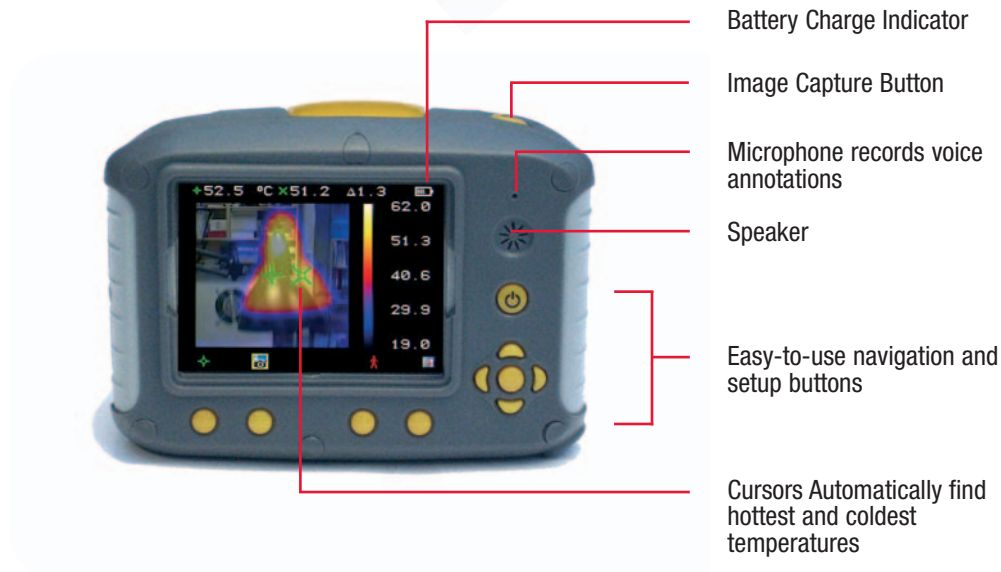
- ## Voice Annotation on Saved Images

  The camera can save up to a 1000 images via the cameras SD card. For a user who wants to survey a large amount of equipment, a voice tag recording can be added to each image. Voice recordings can be played back on the camera or on a PC, which will prove to be invaluable in identifying images at a later date, or when producing a report on the camera's PC software.

- ## Robust and Easy to Use.

  The camera casing is a made of hard plastic over-moulded with soft plastic, providing a very robust package whilst still being light for handling. The camera has an optional handle giving the user flexibility. A rechargeable battery with a 6 hour capacity allows continual operation over a full shift.
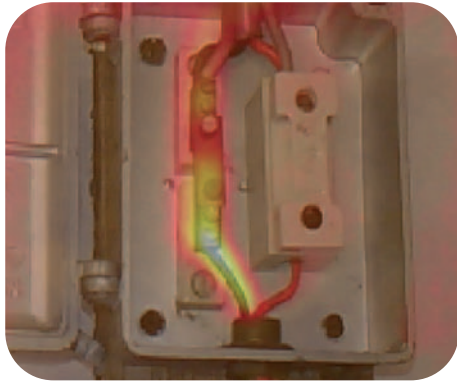
Laser Pointer

LED Illuminator

Visible Camera

IR Lens Focus

Image Capture Trigger

Removeable Handle

Battery Charge Indicator

Image Capture Button

Microphone records voice annotations

Speaker

Easy-to-use navigation and setup buttons

Cursors Automatically find hottest and coldest temperatures

+52.5 °C ×51.2 Δ1.3

62.0
51.3
40.6
29.9
19.0

## Adjustable Blended View for Ease of Use

The IRI 2010 captures both a full infrared image and a visible image.
The thermal image can be overlaid on top of the visible image in various % blends for better clarity
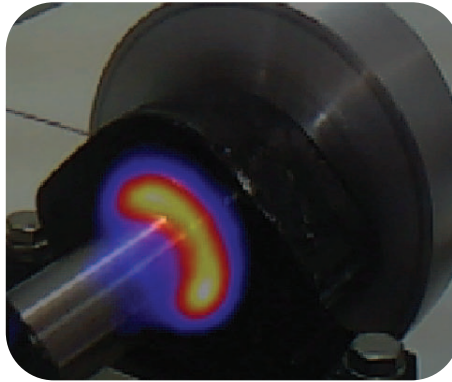
100% Visible ⟶ 0% Visible

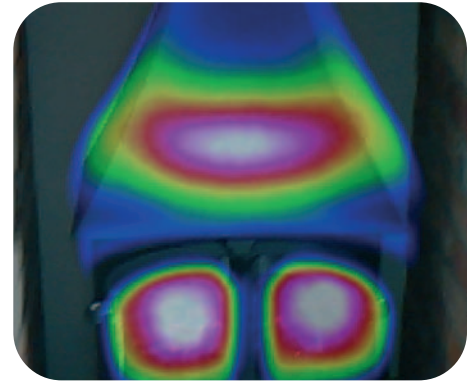# The IRI 2010 can be used for many applications such as:







## Electrical

- Failing/Fatigued components
- Loose/Tight connections
- Overloaded Components
- Uneven voltage distribution

## Mechanical

- Wear
- Poor Lubrication
- Shaft Misalignment
- Overloaded Components

## Energy Efficiency

- Poor or Missing Insulation
- Energy losses
- Integrity of Refrigeration seals
- HVAC

## Camera Specifications

**Measurement**

| | |
|---|---|
| Temperatrue range: | -10°C to 350°C |
| Radiometry: | Two moveable temperature measurement cursors. |
| Accuracy: | The greater of ± 2°C or ± 2% of reading in °C |
| Operating temp for stated accuracy: | 23°C |
| Focal Range: | 0.5m to infinity |

**Image Storage**

| | |
|---|---|
| Number: | Up to 1000 images on micro SD card supplied |

**Imager Power Supply**

| | |
|---|---|
| Battery: | Lithium-ion field rechargeable, Up to 6 hours continuous operation. |

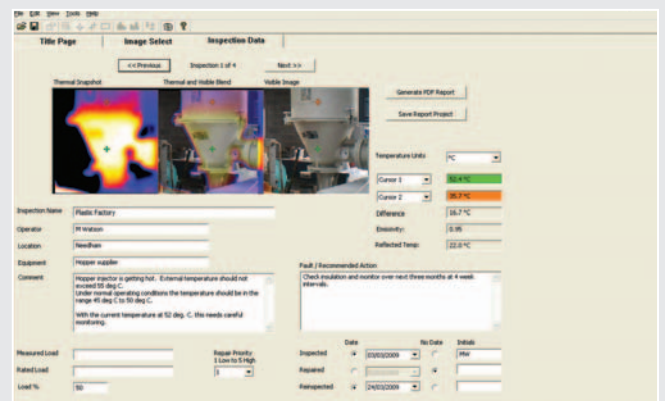**Mechanical**

| | |
|---|---|
| Low Weight: | 0.70kg |

**Settings and Controls**
- On/Off soft power control
- User selectable span & Level control
- Auto adjust span and level
- 4 preset thermal/visible alignment distances
- Manual thermal/visible alignment
- Laser trigger switch
- Readout in °C or °F
- User selectable image integration
- User selectable emissivity tables
- User selectable reflected temperature
- Two moveable temperature measurement cursors
- Area analysis – 3 size options
- X-Y profiles
- Isotherms
- Text annotation
- Voice annotation
- Image capture, time and date
- Visual/audio alarm high and low

**Features**
- Real-time image and temperature measurement display
- Visible/thermal/mixed image fusion (100%/ 75%/ 50%/ 25%/ 0%)
- Simple operation
- Multiple temperature measurement
- Image browser
- Battery Charge indicator
- Lightweight
- Laser Pointer
- Auto hot/cold seeker
- Selectable Language
- Thermal lens focus meter
- LED illuminator for operation in dark environments.





Above images are examples of the report writing software provided with the IRI 2010 Thermal Imaging Camera.

## IRI 2010 Includes:

IR Camera, handle, Battery, AC Adaptor, Quick Start Guide, Carrying Case, CD with user manual and software (Analysis and report writer)