

## IRI 4010

### **MULTI-PURPOSE THERMAL IMAGER**

The IRI 4010 is an innovative thermal imager product, which offers outstanding imaging and temperature measurement performance together with the traditional Irisys features of flexibility, ease of use, and minimal cost of ownership.

Irisys has produced an imager that is ideal for the thermographer and maintenance engineer alike; high quality images may be captured and manipulated offline or problems can be resolved on the spot. The camera comes with an industry leading 3½" display and delivers price and performance that are unique to Irisys.

#### **Typical applications for the IRI 4010 include:**

- Predictive and Preventative Maintenance electrical and mechanical
- Process Monitoring
- HVAC & R Troubleshooting and Maintenance
- General Industrial/Domestic Inspection
- Security

#### **Product Description**

The ergonomically designed imager houses the complete uncooled microbolometer-based camera core together with a long life Li-ion battery pack. For ease of use the image is displayed on a large 3½" colour LCD with LED backlight. Images can be captured using an MMC or SD card for recall and further analysis if required. Images can also be downloaded to a PC from the memory card for analysis, report generation and printing.

#### **Operation**

Designed for self-contained use, the camera is the ideal tool for the maintenance engineer in the 21st Century. The high power, field replaceable, rechargeable Li-ion battery allows continuous operation for a working shift. The IRI 4010 is fully radiometric; temperature measurements can be made over the entire image, and hot spots can be identified by use of a trigger activated laser pointer.



***“ The flexibility, ease of use and above all, the low cost of this product extend the normal application areas for thermal imaging from military and professional use, to wider use in industrial, commercial and domestic applications. ”***

## IRI 4010

### SPECIFICATION

#### PERFORMANCE

Field of view (FOV):	20° x 15°
Focus:	Manual
Minimum Focus:	30cm
Spectral Response:	8µm to 14µm
Thermal Sensitivity:	NETD ≤80mK (0.08°C) @ 23°C ambient and 25°C scene temperature
Detector:	160 x 120 pixels uncooled microbolometer

#### IMAGE STORAGE

Number:	Over 1000 images on SD card supplied
Medium:	MMC/SD card

#### DISPLAY

3½" colour LCD with LED backlight  
4 colour palettes

#### LASER POINTER

A built in Class 2 laser is supplied to highlight the central measurement area

#### MEASUREMENT

Temperature range:	-10°C to +250°C
Radiometry:	Two movable temperature measurement cursors Temperature difference measurement
Emissivity Correction:	User selectable 0.1 to 1.0 in steps of 0.01 with reflected ambient temperature compensation
Accuracy:	The greater of ±2°C or ±2% of reading in °C for ambient temperature -15°C to +45°C ±10°C for ambient temperature range of +45°C to +50°C and for scene temperatures of +50°C to +250°C Not specified for scene temperatures below +50°C

#### IMAGER POWER SUPPLY

Battery:	Lithium-ion field rechargeable, replaceable batteries
Operation time:	6 hours continuous operation
AC operation:	AC adaptor supplied

#### MECHANICAL

Housing:	Impact Resistant Plastic
Dimensions:	230mm x 120mm x 110mm
Weight:	0.75kg including battery
Mounting:	Handheld & Tripod mounting

#### IRI 4010 INCLUDES

IR Camera, Battery, AC adaptor, USB Cable, CD with user manual and software (PC analysis and Report writer), carrying case, wrist strap, rubber protector, SD card and SD card reader.

#### OPTIONAL ACCESSORIES

Desktop charger; 12V car charger; additional battery; light shade.

#### INTERFACES

USB type B

#### SETTINGS AND CONTROLS

- On/Off soft power control
- User selectable span control
- User selectable level control
- Auto adjust span and level
- Display palettes: rainbow, ironbow, high contrast and greyscale
- Laser trigger switch
- Readout in °C, °F or K
- Image capture, time and date
- 2 x digital zoom

#### FEATURES

- Real time image and temperature measurement display
- Auto hot/cold seeker
- Area analysis
- Crisp high resolution images
- Large 3½" inch display
- Simple operation
- Multiple temperature measurement
- Multiple image storage and retrieval at full digital resolution
- Image browser with full image adjustment
- Battery Charge indicator
- Lightweight

#### ENVIRONMENT

Temp. operating range:	-15°C to +50°C
Temp. storage range:	-20°C to +70°C
Humidity:	10% to 90% non condensing
CE Mark (Europe)	
Vibration:	MIL-PRF-28800F class 2 section 4.5.5.3.1
Shock:	MIL-PRF-28800F class 2 section 4.5.5.4.1
Drop Test:	MIL-PRF-28800F class 2 section 4.5.5.4.2
IP rating:	IP42

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