

## IRI 4040

### Long Range Thermal Imager

The IRI 4040 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 3 1/2" display and delivers price and performance that are unique to IRISYS.

The narrow angle 9.1° x 6.8° lens enables detection and temperature measurement of small objects over long distances. The IRI 4040 is especially suitable for use in the power utilities industries for the inspection of substation and overhead distribution and transmission lines.



**The IRI 4040 Long Range Thermal Imager**

### **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 3 1/2" 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 all maintenance engineers. The high capacity, field replaceable, rechargeable Li-ion battery allows continuous operation for a full working shift. The IRI 4040 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.

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**Innovative Thermal Imaging**

## IRI 4040

### SPECIFICATION

#### PERFORMANCE

Field of view (FOV): 9.1° x 6.8°  
Focus: Manual  
Minimum Focus: 50cm (120cm for radiometry)  
Spectral Response: 8µm to 14µm  
Thermal Sensitivity: 150mK (0.15°C) @  
21°C ambient and  
25°C scene temperature  
Imaging Range: -10°C to 250°C  
Detector: 160x120 pixels  
uncooled microbolometer

#### IMAGE STORAGE

Number: Up to 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: 0°C to +250°C  
Radiometry: Two movable temperature measurement cursors  
Temperature difference measurement  
Emissivity Correction: User selectable 0.2 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.

#### IMAGER POWER SUPPLY

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

#### MECHANICAL

Housing: Impact Resistant Plastic  
Dimensions: 230mm x 120mm x 135mm  
Weight: Less than 0.8kg including battery  
Mounting: Handheld & Tripod mounting

#### IRI 4040 INCLUDES

IR Camera, Battery, AC adaptor, USB Cable, user manual and software CD, carrying case, wrist strap, SD card and SD card reader, light shade.

#### OPTIONAL ACCESSORIES

Report writing software; desktop charger; 12V car charger; additional battery.

#### 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
- Crisp high resolution images
- Large 3 ½ 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 +45°C  
Temp. storage range: -20°C to +70°C  
Operating temperature for stated accuracy: 23°C

Humidity: 10% to 90% non condensing  
CE Mark (Europe)

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Thermal Imaging**