

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 which is ideal for both 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 ½" display and delivers both price and performance that's 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
- Security



The IRI 4010 Multi-Purpose 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 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 contains everything required by the maintenance engineer in the 21st Century. The high power, field replaceable, rechargeable Li-ion battery allows continuous operation for a full working shift. The IRI 4010 is fully radiometric; temperature measurements can be made over the entire image, and hot spots can also be identified by use of a trigger activated laser pointer.

© 2006 InfraRed Integrated Systems Limited (IRISYS). No part of this publication may be reproduced without prior permission in writing from InfraRed Integrated Systems Limited. This document gives only a general description of the product and except where expressly provided otherwise shall form no part of any contract. Whilst IRISYS endeavour to ensure that all descriptions, weights, temperatures, dimensions, and other statistics contained in this product information are correct, they are intended to give a general idea of the product only and IRISYS do not warrant their accuracy or accept liability for any reliance on them. IRISYS have a policy of continuous product improvement and reserve the right to change the specification of the products and descriptions in this data sheet. Prior to ordering products please check with IRISYS for current specification details. This product may be protected by patents RE36136, RE36706, US4752694, US5286976, US5300915, US5420419, US5895233 and US5637871. All brands and product names are acknowledged and may be trademarks or registered trademarks of their respective holders.





SPECIFICATION

PERFORMANCE

Field of view (FOV): 20° x 15° Focus: Manual Minimum Focus: 30cm

Spectral Response: 8µm to 14µm

Thermal Sensitivity: 150mK @ 25 °C scene

temperature

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: -10 °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 $\pm 2\%$ of reading

or ± 2 °C

IMAGER POWER SUPPLY

Battery: Lithium-ion field rechargeable,

replaceable batteries

Operation time: 4 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, user manual and software CD, carrying case, wrist strap, SD card and

SD card reader.

OPTIONAL ACCESSORIES

Report writing software; 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 or °F

• 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 Humidity: 10% to 90% non condensing

Temp. storage range: $-20\,^{\circ}\text{C}$ to $+70\,^{\circ}\text{C}$ CE Mark (Europe)

Use, duplication or disclosure of data contained on this sheet is subject to the restrictions on the front page of this document.

InfraRed Integrated Systems Ltd, Towcester Mill,

Towcester, Northants, NN12 6AD, UK
Telephone: +44 (0) 1327 357824
Fax: +44 (0) 1327 357825
e-mail: sales@irisys.co.uk
web site: www.irisys.co.uk

Hotshots in Thermal Imaging

