

IRI 1011

Universal Thermal Imager

The IRI 1011 is a groundbreaking thermal imager product which brings the benefits of this versatile technology to the professional, the trades person and the non-specialist alike.

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.

Typical applications for the IRI 1011 include:

- Predictive and Preventative Maintenance
- Process Monitoring
- Research and Development
- HVAC Troubleshooting
- Vehicle Maintenance
- General Industrial/Domestic



The IRI 1011 Universal Thermal Imager

Product Description

The ergonomically designed imager houses the imaging optics, detector, drive electronics, optical modulator, laser pointer and four standard or rechargeable AA size batteries. The system includes an optional pistol grip handle which holds virtually any 'Pocket PC' or compatible 'Palm' device as a combined processing, display unit and image storage device. As an alternative, the output of the imager can be displayed and processed in real time using a PC.

Operation

The system is designed for either one or two handed operation. For one handed operation both the imager and the user provided 'Pocket PC' / 'Palm' device can be attached to the handle to form a single integrated lightweight unit. For two handed operation the imager can be quickly detached from the handle leaving the 'Pocket PC' / 'Palm' device attached for ease of operation. This latter configuration enables the imager to be pointed at awkward angles or used in confined places. Alternatively, instead of using a 'Pocket PC' / 'Palm' device the imager can be linked to a PC or laptop computer using the RS232 serial cable supplied.



SPECIFICATION

PERFORMANCE

Temperature Measurement range:	-10°C to +300°C
Field of view (FOV):	20° x 20°
Spectral Response:	8 to 14 micrometers
Sensitivity:	~0.3K @ 30°C
Displayed Image:	96 x 96 pixels
Detector:	16 x 16 pixel array
Frame rate:	8Hz

IMAGE STORAGE

Up to 1000 images per MB of Memory.

LASER POINTER

A built in Class II laser is supplied to highlight the reference pixel.

IMAGER POWER SUPPLY

Battery:	4 x AA type removable batteries. Lithium cells are recommended for operation at low temperatures.
Operation time:	Up to 8 hours.
AC operation:	AC adaptor, supplied.

MECHANICAL

Housing:	Impact Resistant Plastic.
Dimensions:	120mm x 125mm x 80mm.
Weight:	< 600g not including 'Pocket PC' / 'Palm' device and handle.
Mounting:	Handheld & Tripod mounting.

IRI 1011 INCLUDES

Imager, software for 'Pocket PC', 'Palm' & PC, 2m RS232 connection cable - imager to PC, user manual, AC power supply, carrying case.

OPTION

A pistol grip handle for attaching imager and 'Pocket PC' / 'Palm' Device for single handed operation.

SETTINGS AND CONTROLS:

- User selectable sensitivity settings.
- User selectable offset control (range).
- Auto adjust sensitivity/range.
- Display palettes: red/blue, green/blue and greyscale.
- 'Pocket PC' / 'Palm' device: two moveable temperature measurement cursors.
- PC: up to ten moveable temperature measurement cursors.
- User selectable emissivity values.
- User selectable image integration: 1 to 10 frames.
- Readout in °C, °F and K.
- Image snapshot.
- Image label.

FEATURES - 'POCKET PC' / 'PALM' SOFTWARE

- Real time image and temperature measurement display
- Multiple image storage and retrieval.
- Image browser.
- Battery Charge indicator
- 'Pocket PC' / 'Palm' device controlled by navigator button and touch sensitive screen controls.
- Reflected ambient temperature compensation.
- Temperature difference measurement.

FEATURES - PC SOFTWARE

- Multiple image storage and retrieval.
- Time / Temperature display for up to ten user defined pixels.
- Save all 256 temperature values to Microsoft Excel.
- Copy & Paste images into other Microsoft applications.
- Reflected ambient temperature compensation.
- Real time image and temperature measurement display

COMPUTER REQUIREMENTS

Pocket PC: Compatible with most 'Pocket PC' devices running Microsoft 'Pocket PC' 2000, 2002 and 2003. e.g. HP iPAQ 2210, O2 XDA - (See IRISYS website for compatible Pocket PC's). RS 232 to 'Pocket PC' communication cable or CompactFlash RS 232 adaptor where applicable.

Palm: Palm devices conforming to OS5 or higher, double density screen, 320 x 320 display resolution. eg. Palm Zire 71, Palm Tungsten T3. (See IRISYS website for compatible Palms)

PC: IBM compatible PC with a minimum of: 300MHz processor, MS Windows 2000 and XP (see IRISYS website for current list of operating systems supported). RS 232 serial port (115k Baud), 16 bit colour graphics capability.

ENVIRONMENT			
Temp. operating range:	-5°C to +50°C	Humidity:	10% to 90% non condensing
Temp. storage range:	-20°C to +80°C	CE Mark (Europe):	Complies with EMC directive

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