IR32 DS

DUAL VIEW THERMAL IMAGING CAMERA

Ideal for use by both thermographers and maintenance engineers. The IR32DS provides high performance 320 x 240 pixel resolution. The high quality images may be captured and manipulated in the camera allowing problems to be resolved quickly. Images can also be downloaded to a PC for analysis and reporting. The camera comes with an industry leading $3^{1}/_{2}$ display.

Typical applications for the IR32DS include:

- Predictive and Preventative Maintenance
- Electrical and Mechanical inspections
- Process Monitoring
- HVAC & R Troubleshooting and Maintenance
- General Industrial/Domestic Inspection

Key Features:

Image Fusion - The camera can display a thermal image, a visual image only with thermal cursors or a fusion of both thermal and visual images, or as a fused PiP (Picture in Picture) or thermal above or below a certain temperature. An LED illuminator is available for dark environments.

Voice Annotation - Record voice notes to each image saved. Playback on the camera through its speaker or through headphones and on the PC, once the image has been transferred using the supplied software.

Alarms - The camera can detect hot & cold spots and be set to alarm when the temperature is above/below the alarm threshold. Alarms are both audible through the camera speaker or headphones and visual via the camera display.

Time Sequencing - Allows unattended monitoring of equipment over a period of time to observe changes in equipment performance. This can be at regular timed intervals or on user defined threshold temperature alarms.

Individual cursor emissivity settings - Four moveable cursors allowing easy comparison of components and items in a scene with individual emissivity settings to get a more accurate measure of actual temperatures.

Battery Life - Long battery life (5 hours) which is also replaceable, allowing a typical shift to be worked without recharging.

" The high quality images may be captured and manipulated in the camera allowing problems to be resolved quickly. "

Irisys
Thermal Imaging
Red Hot Intelligence

TECHNICAL SPECIFICATION

PERFORMANCE

Field of view (FOV):	21.4° x 16°
Focus:	Manual
Minimum Focus:	30cm
Spectral Response:	8µm to 14µm
Thermal Sensitivity:	NETD ≤80mK (0.08°C) @ 30°C Scene Temp.
Detector:	320 x 240 Pixels uncooled microbolometer

IMAGE STORAGE

Number:	Over 1000 images on micro SD card supplied

DISPLAY

$3^1/_2$" colour LCD with LED Backlight. 8 colour palettes. Mixed thermal and visible images. Fusion and PiP.

DISPLAY OPTIONS

Thermal images or visible images or mixed thermal and visible images including picture in picture with blending. Thermal above and Thermal below

LASER POINTER

A built in Class 2 laser is supplied to highlight the centre of the thermal image. (Aligned at 2 metres)

Beam Divergence	<0.2mrad
Maximum Output	<1mW.

MEASUREMENT

Temperature range:	-10°C to + 250°C
Radiometry:	Four moveable temperature measurement cursors giving automatic temperature difference measurement and auto locking onto hottest and coldest points
Emissivity Correction:	User selectable 0.10 to 1.00 in steps of 0.01 with reflected temperature compensation
Accuracy:	The greater of ±2°C or ±2% of reading in °C for ambient temperatures between -15°C and +45°C

IMAGER POWER SUPPLY

Battery:	Lithium-ion field rechargeable.
Operation time:	Up to 5 hours continuous operation
AC operation:	AC adaptor supplied charge through USB port

MECHANICAL

Housing:	Impact Resistant Plastic with over moulded soft elastomer
Dimensions:	130mm x 95mm x 220mm
Weight:	0.80kg
Mounting:	Handheld & tripod mounting $1/_4$" BSW

SETTINGS AND CONTROLS

- Auto/user selectable span and level control
- Readout in °C or °F
- Four moveable temperature measurement cursors with individual emissivity values and temperature difference between two points
- User selectable emissivity setting for each measurement cursor
- Auto hot and cold seeking or hot only or cold only
- User selectable reflected temperature compensation
- Area analysis - 3 options
- X-Y thermal profiles
- Isotherms with temperature difference
- Voice and or text annotation

- Image capture; time and date
- Visual/audio alarm for above/below set temperature value
- Palette selection
- User selectable integration
- Image fusion control: 0 to 100% adjustment on whole image and on picture in picture. Threshold control on thermal above and below display
- Electronic zoom, x2, x4
- Multi-language options
- Battery power indicator
- Image browser showing thumbnails and voice annotation playback
- Time or Alarm sequence recording
- Alarms
- Illuminator

OPTIONAL ACCESSORIES

- 12V car charger
- Light shade
- Hard carry case
- Additional battery
- Desktop charger

COMPUTER REQUIREMENTS (for PC software)

PC: IBM compatible PC with one of the following operating systems: Windows XP, Vista and Windows 7. (See Irisys Website for currently supported operating systems)

ENVIRONMENT

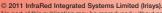|	
Temp. operating range:	-15°C to +50°C
Humidity:	10% to 90% non condensing
Temp. storage range:	-20°C to +70°C
CE Mark (Europe)	
IP rating:	IP54
Vibration:	MIL-PRF-28800F class 2 section 4.5.5.3.1
Shock:	MIL-PRF-28800F class 2 section 4.5.5.4.1
Droptest:	MIL-PRF-28800F class 2 section 4.5.5.4.2 2 metre drop test

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CAUTION
LASER RADIATION
DO NOT STARE INTO BEAM
635nm 0.9mW
CLASS 2 LASER PRODUCT