NEW! ThermaCAM® EX320

The latest addition to the award-winning FLIR ThermaCAM® E-Series family

The ThermaCAM® EX320 has a true, built-in 320 x 240 pixel array, giving you four times the resolution of any IR camera in its size and price range, and making it the first, low cost, ultra portable infrared camera to provide such detailed imaging and superior performance.

Now with post-processing capabilities and the world's most powerful infrared detector, the EX320 offers unmatched temperature measurement accuracy and the best image quality.

Interchangeable optics and calibrated for harsh environments, the EX320 is rugged yet flexible, feature rich and affordable; the smallest, smartest infrared camera in the market today.

- TRUE 320 X 240 PIXEL ARRAY FOR MOST ACCURATE TEMPERATURE MEASUREMENT
- BEST IMAGE QUALITY
- INTERCHANGEABLE OPTICS
- BUILT-IN LASER LOCATIR™
- ROBUST POST PROCESSING CAPABILITIES
- WORLD'S BEST INFRARED DETECTOR
- EASY-VIEW 2.5" COLOR LCD
- EASY-TO-USE

FIND PROBLEMS FAST

Unlike other cameras, you can use the powerful, affordable EX320 in all types of harsh industrial environments to find faults in electrical and mechanical systems quickly and accurately. Store more than 50 thermal images inside the camera, along with text annotations for post-processing and analysis on the camera, or after downloading to a PC.

MOST ACCURATE TEMPERATURE MEASUREMENT

The EX320 is the most accurate lightweight, handheld IR camera on the market today. Using the world's best infrared detector material, vanadium oxide, the EX320 sees temperature differences as small as 0.08°C and provides 76,800 picture elements in each image.

LIGHTWEIGHT, RUGGED & ERGONOMIC

The EX320 is built tough for hard work in the field and in all weather conditions and industrial environments — a critical design capability. Dust and splash proof, the EX320 meets IP 54 standards. Unlike other cameras that might be "lab calibrated," the EX320 won't seize-up in freezing cold, extreme heat or other harsh conditions. Its exclusive Ambient Temperature Compensation (ATC) technology assures accuracy under the most challenging ambient temperature conditions.

DOWNLOAD AND DOCUMENT

Download thermal images with measurements to your PC quickly with ThermaCAM QuickView™ software and standard USB or serial cables. Document your findings simply by inserting the JPEG images into your favorite word processing program.

FLEXIBLE JPEG IMAGE STORAGE WITH POST PROCESSING

Store and recall more than 50 calibrated thermal images using the camera's on-board memory. The EX320's radiometric JPEG image format allows you to go back to any image at any time to add and move spots, measure temperatures, and perform analysis you may have missed in the field.

VIEW SENSITIVE THERMAL IMAGES AT STANDARD TV RATES

A maintenance-free, state-of-the-art uncooled FPA infrared detector produces crisp thermal images that reveal subtle temperature variations that can signal electro-mechanical problems. The EX320 can detect problems before they become critical, helping you increase safety, reduce production downtime, and eliminate potential fires. TV rate imaging (30 Hz) allows you to scan bus ducts and capture sharp images of moving targets.

PINPOINT PROBLEMS WITH PRECISION

The built-in Laser LocatIR™ projects a bright red dot on the target that enables you to associate the IR image with the real physical target. This feature greatly enhances worker safety by eliminating the tendency to "finger point" at problems in potentially hazardous electrical environments.

INTERCHANGEABLE OPTICS

Many targets in your facility cannot be imaged or measured accurately without the proper optics. Optional lenses are available for the EX320 to meet your application needs. A telescope lens is ideal for inspecting distant targets such as overhead power lines. A wide angle lens nearly doubles the standard field-of-view for evaluating large objects from a short distance, such as roofs and electrical panels.

SMART POWER MANAGEMENT

Lightweight, longlife Li-Ion batteries assure uninterrupted inspections. The EX320 includes an external 2-bay battery charger and an internal battery charger. A 12 VDC car/truck charger adapter is also available.

FLIR SYSTEMS™

THERMACAM® EX320 TECHNICAL SPECIFICATIONS

IMAGING PERFORMANCE

Field of view	Interchangeable; 25° x 19° (standard), 15° x 11° or 45° x 36°
Thermal sensitivity	80 mK
Detector type	Focal Plane Array (FPA), uncooled Vanadium Oxide micro bolometer, 320 x 240 pixels - 25/30 Hz
Digital Zoom	1x,2x,4x
Spectral range	7.5 to 13 µm
Spot size ratio (with 15° lens)	500:1

IMAGE PRESENTATION

Display	2.5" color LCD, 320 x 240 pixels in IR image
Image Controls	Palettes (Iron, Rainbow, RainbowHC, B/W, B/W inv), Level, Span, Auto adjust (continuous/manual) and semi-automatic

MEASUREMENT

Temperature range	-20°C to +250°C (-4°F to +482°F) Up to 1250 °C (2282 °F), optional
Accuracy	± 2°C (±3.6°F) or ± 2% of absolute temperature in °C
Measurement modes	3 movable spots, area max, area min, area average, temp difference, color alarm above or below
Set-up controls	Date/time, Temperature units °C/°F, Language (English, Spanish), Scale, Info field, LCD intensity (high/normal/low)
Measurement corrections	Reflected ambient. Automatic, based on user-input

IMAGE STORAGE

Digital storage functions	Freeze, Store, Standard Calibrated JPEG images, Delete all images, Delete image, Open
Image storage capacity	More than 50 Calibrated JPEG Images with image gallery
Text annotation of images	Predefined text selected and stored together with image

LASER LOCATIR™

Classification	Class 2
Type	Semiconductor A1GaInP Diode Laser: 1mW/635 nm (red)

POWER SOURCE

Battery type	Li-Ion; rechargeable, field replaceable (2)
Battery operating time	2 hours. Display shows battery status
Battery charging	In camera, AC adapter or 12V from car with optional 12V cable. 2 bay intelligent charger (included)
AC operation	AC adapter, 90-260VAC, 25/30 Hz/12VDC out
Voltage	11 to 16VDC
Power saving	Automatic shutdown and sleep mode (user-selectable)

ENVIRONMENTAL

Operating temperature range	-15 °C to +45 °C (5 °F to 111 °F)
Storage temperature range	-40 °C to +70 °C (-40 °F to 158 °F)
Humidity	Operating and storage 20% to 80%, non-condensing, IEC 359
Water and dust resistant (encapsulation)	IP 54, IEC 359
Shock	25g, IEC 68-2-29
Vibration	2g, IEC 68-2-6

PHYSICAL CHARACTERISTICS

Weight	0.8 kg (1.76 lb.), includng battery and 27.4 mm lens
Size (L x W x H)	259mm x 80mm x 135mm (10.2" x 3.2"" x 5.3") with 27.4mm lens
Color	Titanium grey
Tripod mounting	Standard, 1/4" - 20
Cover case	Plastic and rubber

INTERFACES

USB (cable included)	Image and text transfer to PC
Video output	NTSC, standard RCA composite video

SOFTWARE

ThermaCAM® QuickView Software (included)
Compatible with ThermaCAM® Reporter, Microsoft® Office Suite

THERMACAM® EX320 SYSTEM INCLUDES:

- IR camera
- Ruggedized transport case
- Power supply and cord
- Hand strap
- Lens cap
- ThermaCAM® QuickView™ software
- USB cable
- Video-out cable
- User manual (multilingual)
- Battery (2)
- 2-Bay battery charger
- Training CD

INTERCHANGEABLE LENSES (OPTIONAL)

2X Telescope (15° x 11°/1.2m)
0.5X Wide angle (45° x 36°/0.1m)

SMART VALUE OPTION

Infrared is the only technology that can accurately and quickly locate faults before failures, shutdowns, or even fires occur.

FLIR SYSTEMS™

The Global Leader in Infrared Cameras

1-800-GO-INFRA

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