

MEASURE TEMPERATURE CORRECTLY

For an opaque target, emissivity and reflectivity are both important for correct temperature measurement.

Shiny metals, plastics, wood and many other materials found in industry have a different emissivity. An infrared measuring device should allow users to adjust emissivity and background reflected temperature for correct temperature measurement.

Get a free IR Thermography Primer by registering on line at WWW. flir.com.hk

* A guide book to learn the basics of thermography and important features of an IR camera.









Guard Against Downtime

Discover hot spots and implement a maintenance program to avoid future disasters.





Find Faults Earlier

15-20% of industrial fires are caused by electrical faults. Regular IR surveys can even save on insurances costs!





See What You Can't See

Check liquid level of tanks, find sediment build up, scan for leaks, and discover signs of flow problems.





Detect problems in steam pipes

Sediment build-up, blockages, deterioration of lagging and potential breakages in pipes can also be detected.

ABOUT FLIR

- The only IR Camera manufacturer in the world who produces its own state of the art detectors.
- As the leading IR camera manufacturer in the world FLIR's focus for more than 45 years has been on the continuous improvement of its product
- Solid resources in supporting customers:
 Service Centre based in Melbourne.



Accurate Temperature Measurement

In order to accurately measure temperature, the whole i-series range allows the user to adjust the emissivity from 0.1 to 1.0 depending on the material. The background reflected temperature can also be adjusted, which is equally important.

Light Weight and Robust Design

The FLIR i60 only weighs 600g (1.32 lbs) and meets the 25G shock and 2G vibration tests. The camera is IP54 rated for protection from dust and water spray.





Easy to Use

FLIR i60 has a logical manual-operation, and design for maximum usability and comfort.

i60 Image Presentation

Razor sharp visual images, thanks to the 2.3 mega pixels camera.

Each pixel of the IR image carries valuable temperature information. A 180×180 pixel array means more valuable temperature measurement information to assist in isolating the problem and solving it.



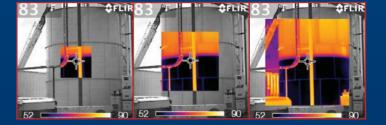




The built-in lamps assist in taking a good visual image in poorly lit sites.

Laser pointer helps to identify your measured target easily.

PIP overlays the IR image over hi-res visual image in real time, and unlike our competitiors, FLIR's FUSION PIP is fully scalable, permitting you to re-size the IR image as needed on a large 3.5 inch color display.



Field Replaceable Battery

With a 5 hours battery life, and the ability to easily change batteries you can keep up your demanding work schedule.





Saved Image Management

Image management is easy thanks to the Standard JPEG format. The thumbnail gallery on the LCD saves time when retrieving the best images for your reports.









| Measurement | | | | | |
|-------------------------------------|--|--|--|--|--|
| Temperature range | | 0°C to +250°C | -20°C to +120°C , 0°C to 350 °C | -20°C to +120°C , 0°C to 350 °C | -20°C to +120°C , 0°C to 350 °C |
| Accuracy | | ±2°C (±3.6°F) or 2% of reading | ±2°C (±3.6°F) or 2% of reading | ±2°C (±3.6°F) or 2% of reading | ±2°C (±3.6°F) or 2% of reading |
| Measurement correction | | Adjustable emissivity factor from 0.1 to 1.0; emissivity table is provided | Adjustable emissivity factor from 0.1 to 1.0; emissivity table is provided | Adjustable emissivity factor from 0.1 to 1.0; emissivity table is provided | Adjustable emissivity factor from 0.1 to 1.0; emissivity table is provided |
| Manual / Set up commands | Palettes (black and white, iron and rainbow) | Yes | Yes | Yes | Yes |
| | C/F | Yes | Yes | Yes | Yes |
| | Language | Yes | Yes | Yes | Yes |
| | Date and time format | Yes | Yes | Yes | Yes |
| | Auto adjust (Manual / Automatic) | - | Yes | Yes | Yes |
| Detector Data | | | | | |
| Detector type | | Focal plane array (FPA), uncooled microbolometer | Focal plane array (FPA), uncooled microbolometer | Focal plane array (FPA), uncooled microbolometer | Focal plane array (FPA), uncooled microbolometer |
| Spectral range | | 7.5-13µm | 7.5-13µm | 7.5-13µm | 7.5-13µm |
| IR resolution | | 80 x 80 pixels | 120 x 120 pixels | 140 x 140 pixels | 180 x 180 pixels |
| Visual resolution | | - | 0.6 megapixel | 2.3 megapixel | 2.3 megapixel |
| Image Pres | sentation | | | | |
| Display | | Built in display, 2.8" color LCD | Built in display, 3.5" color LCD, 256k color | Built in display, 3.5" color LCD, 256k color | Built in display, 3.5" color LCD, 256k color |
| Laser in IR image | | • | - DID (5) | - | Yes |
| IR fusion picture in picture (PIP) | | | PIP (fixed) | PIP (3 steps) | PIP (PIP scalable) |
| IR Imaging and Optical Data | | | | | |
| Field of view / min. focus distance | | 17° x 17° | 25° x 25° | 25° x 25° | 25° x 25° |
| Min. focus distance | | 0.6m (2ft.) | 0.12m (0.41ft.) | 0.12m (0.41ft.) | 0.12m (0.41ft.) |
| Thermal sensitivity (N.E.T.D) | | < 0.1°C (0.18°F) | < 0.1°C (<0.18°F) | < 0.1°C (<0.18°F) | < 0.1°C (<0.18°F) |
| Image Storage | | | | | |
| Storage type | | miniSD card, 512 MB (>5000 images) | Removable SD micro memory card (1 GB), storage capacity (>1000 images) | Removable SD micro memory card (1 GB), storage capacity (>1000 images) | Removable SD micro memory card (1 GB), storage capacity (>1000 images) |
| Files format | | Standard radiometric JPEG | Standard radiometric JPEG | Standard radiometric JPEG | Standard radiometric JPEG |
| Laser Pointer | | | | | |
| Laser pointer | | - | - | Yes | Yes |
| Laser class | | - | - | Class 2 | Class 2 |
| Power System | | | | | |
| Battery operation time | | 5 hours | 5 hours | 5 hours | 5 hours |
| Battery information | | Rechargeable Li Ion battery | Rechargeable Li Ion battery, Field replaceable, Display shows battery status | Rechargeable Li Ion battery, Field replaceable, Display shows battery status | Rechargeable Li Ion battery, Field replaceable, Display shows battery status |
| Charging system | | In camera, AC adapter | In camera, AC adapter | In camera, AC adapter | In camera, AC adapter |
| AC operation | | AC adapter, 90–260 VAC input. 5 V output to camera | AC adapter, 90–260 VAC input. 12 V output to camera | AC adapte 90–260 VAC input. 12 V output to camera | AC adapte 90–260 VAC input. 12 V output to camera |
| Environme | ntal Data | | | | |
| Operation temperature range | | 0°C to +50°C (+32°F to +122°F) | -15°C to +50°C (+5°F to +122°F) | -15°C to +50°C (+5°F to +122°F) | -15°C to +50°C (+5°F to +122°F) |
| Shock test | | 25G (IEC 60068-2-29) | 25G (IEC 60068-2-29) | 25G (IEC 60068-2-29) | 25G (IEC 60068-2-29) |
| Vibration test | | 2G (IEC 60068-2-6) | 2G (IEC 60068-2-6) | 2G (IEC 60068-2-6) | 2G (IEC 60068-2-6) |
| IP rating | | IP43 | IP54 | IP54 | IP54 |
| Data Communication Interfaces | | | | | |
| Video output | | - | MPEG4 via. USB | MPEG4 via. USB | MPEG4 via. USB |
| USB – data transfer to and from PC | | Yes | Yes | Yes | Yes |
| Physical Data | | | | | |
| Weight | | 340g (0.75 lbs) | 600g (1.32 lb) | 600g (1.32 lb) | 600g (1.32 lb) |
| Size (L x W x H) | | 8.8" x 3.1" x 3.3" | 9.3" x 3.2" x 6.9" | 9.3" x 3.2" x 6.9" | 9.3" x 3.2" x 6.9" |
| Built-in language versions | | 21 different languages | 21 different languages | 21 different languages | 21 different languages |
| Price | | Contact your local distributor now and find out the attractive price! | | | |

Asia Pacific Headquarter (Hong Kong)

FLIR Systems Co., Ltd.
Room 1613 – 16, Tower 2, Grand Central Plaza,
138 Shatin Rural Committee Road, N.T, Hong Kong
Tel : +852 2792 8955
Fax : +852 2792 8952
E-mail : flir@flir.com.hk
Web : www.flir.com.hk