



# FLIR Scout TS-Series

Thermal imaging cameras for wildlife observations

*The FLIR Scout TS-Series are rugged handheld thermal imaging cameras that have been especially developed for wildlife observations and hunters. Thermal imaging cameras need no light whatsoever to produce an image. They help you to see clearly at night, in practically all weather circumstances.*

After sunset, a lot of animals are active. With the help of a thermal imaging camera like the TS-Series you will be able to monitor their activities. The TS-Series will not only help you to find animals in total darkness but during daylight as well.

Thermal imaging cameras make extremely small temperature differences visible. Based on these temperature differences they create a clear image. Furthermore, thermal contrast is extremely difficult to mask. This means that during daylight you will clearly see animals that are hidden in trees or bushes. Their natural camouflage will not help them to hide anymore.

Thermal imaging cameras are widely used by professional documentary makers and hunters worldwide. Until now they have been extremely expensive. The TS-Series are now bringing thermal imaging cameras within reach of nature and wildlife enthusiasts and for hunters.

## InstAlert™

The unique InstAlert feature colors the hottest parts in the thermal image red. This makes it extremely easy to spot animals in the thermal image.

## Crisp thermal images, choice of image quality

The TS-Series produces thermal images of 240 x 180 or 320 x 240 pixels on which the smallest of details can be seen. Advanced internal camera software delivers a crisp image without the need for user adjustments.

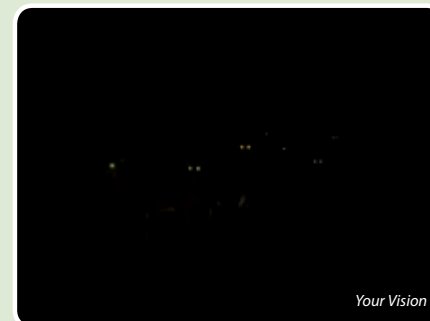
## Different versions available

The TS Series is available in a Basic and a Pro version. The Pro versions contain useful features such as still image and video storage. The images and video can be used to insert in your own video or photo collection.

## Wide angle lens

The TS-Series are providing a 24° field of view. It offers an excellent combination of range performance and situational awareness. A deer for example can be spotted at about 450 meters away, in total darkness. For situations where longer range performance is needed a 2X extender is available. It spots a deer at approximately 790 meters.

For even longer range performance, the TS32r is available. It is equipped with a 7° lens. Due to the narrow field of view it can be used to spot a deer at about 1,450 meters away.



Your Vision



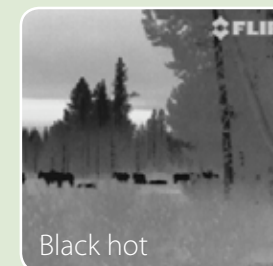
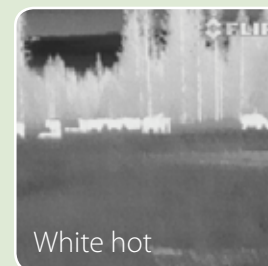
Thermal image

*The FLIR TS-Series allows you to spot wildlife activities in total darkness.*

## Hot Shoe & Shutterd Eyepiece

The TS-Series come standard with a "Hot Shoe". Not only does it allow for tripod mounting of the TS-Series it also has a power in and video out jack. This means that you can put the TS-Series in a certain position and follow what is happening from a hidden location, on a large monitor.

The shuttered eyepiece keeps light from coming out of the viewfinder and avoids alarming animals or other target subjects.



FLIR SCOUT TS32r

FLIR SCOUT TS24

# TS-Series

## Model specific specifications

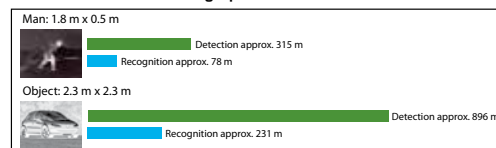


| IMAGING PERFORMANCE                              | TS24                                                                                       | TS24 Pro                                                               | TS32                                                                   | TS32 Pro                                                               | TS32r                                               | TS32r Pro                                                       |
|--------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------|
| Field of view                                    | 24° (H) x 18°(V) / 12°(H) x 9° (V) with 2X extender                                        | 24° (H) x 18°(V) / 12°(H) x 9° (V) with 2X extender                    | 24° (H) x 18°(V) / 12°(H) x 9° (V) with 2X extender                    | 24° (H) x 18°(V) / 12°(H) x 9° (V) with 2X extender                    | 24° (H) x 18°(V) / 12°(H) x 9° (V) with 2X extender | 7° (H) x 5° (V)                                                 |
| Image resolution                                 | 240 x 180 pixels                                                                           | 240 x 180 pixels                                                       | 320 x 240 pixels                                                       | 320 x 240 pixels                                                       | 320 x 240 pixels                                    | 320 x 240 pixels                                                |
| Focus                                            | Fixed - with 2x extender: manual                                                           | Fixed - with 2x extender: manual                                       | Fixed - with 2x extender: manual                                       | Fixed - with 2x extender: manual                                       | Fixed                                               | Fixed                                                           |
| Zoom                                             | NA                                                                                         | 2X                                                                     | 2X                                                                     | 2X                                                                     | 2X                                                  | 2X                                                              |
| IMAGE STORAGE                                    |                                                                                            |                                                                        |                                                                        |                                                                        |                                                     |                                                                 |
| Freeze on capture                                | Yes                                                                                        | NA                                                                     | Yes                                                                    | NA                                                                     | Yes                                                 | NA                                                              |
| Format                                           | NA                                                                                         | Standard JPEG - 2 GB SD-Card                                           | NA                                                                     | Standard JPEG - 2 GB SD-Card                                           | NA                                                  | Standard JPEG - 2 GB SD-Card                                    |
| Storage functions                                | NA                                                                                         | Single Image                                                           | NA                                                                     | Single Image                                                           | NA                                                  | Single Image                                                    |
| VIDEO STORAGE                                    |                                                                                            |                                                                        |                                                                        |                                                                        |                                                     |                                                                 |
| Format                                           | NA                                                                                         | NA                                                                     | NA                                                                     | MPEG4 - 2 GB SD-card                                                   | NA                                                  | MPEG4 - 2 GB SD-card                                            |
| Storage functions                                | NA                                                                                         | NA                                                                     | NA                                                                     | 9 Hz, Full frame up to limit of SD-card, approx. 8 seconds / MB        | NA                                                  | 9 Hz, Full frame up to limit of SD-card, approx. 8 seconds / MB |
| INTERFACES                                       |                                                                                            |                                                                        |                                                                        |                                                                        |                                                     |                                                                 |
| SD Cards                                         | 1 slot                                                                                     | 1 slot                                                                 | 1 slot                                                                 | 1 slot                                                                 | 1 slot                                              | 1 slot                                                          |
| USB2                                             | –                                                                                          | Image transfer to PC                                                   | Image transfer to PC                                                   | Image transfer to PC                                                   | Image transfer to PC                                | Image transfer to PC                                            |
| ENVIRONMENTAL SPECIFICATIONS                     |                                                                                            |                                                                        |                                                                        |                                                                        |                                                     |                                                                 |
| Operating Temp.                                  | 0°C to +50°C                                                                               | 0°C to +50°C                                                           | -20°C to +60°C                                                         | -20°C to +60°C                                                         | -20°C to +60°C                                      | -20°C to +60°C                                                  |
| Storage Temp.                                    | -20°C to +70°C                                                                             | -20°C to +70°C                                                         | -40°C to +75°C                                                         | -40°C to +75°C                                                         | -40°C to +75°C                                      | -40°C to +75°C                                                  |
| PHYSICAL CHARACTERISTICS                         |                                                                                            |                                                                        |                                                                        |                                                                        |                                                     |                                                                 |
| Weight (incl. lens)                              | 653 g with batteries<br>1000 g with 2X extender                                            | 653 g with batteries<br>1000 g with 2X extender                        | 653 g with batteries<br>1000 g with 2X extender                        | 653 g with batteries<br>1000 g with 2X extender                        | Approx. 1000 g with batteries                       | Approx. 1000 g with batteries                                   |
| Size (L x W x H)                                 | 240 x 85 x 60 mm without extender<br>265 x 85 x 75 mm with 2x extender                     | 240 x 85 x 60 mm without extender<br>265 x 85 x 75 mm with 2x extender | 240 x 85 x 60 mm without extender<br>265 x 85 x 75 mm with 2x extender | 240 x 85 x 60 mm without extender<br>265 x 85 x 75 mm with 2x extender | 260 x 84.5 x 66.5 mm                                | 260 x 84.5 x 66.5 mm                                            |
| Shipping size (camera + packaging)               | 450 x 280 x 180 mm                                                                         | 450 x 280 x 180 mm                                                     | 450 x 280 x 180 mm                                                     | 450 x 280 x 180 mm                                                     | 450 x 280 x 180 mm                                  | 450 x 280 x 180 mm                                              |
| Shipping weight (camera + packaging)             | 2.8 kg                                                                                     | 2.8 kg                                                                 | 2.8 kg                                                                 | 2.8 kg                                                                 | 2.8 kg                                              | 2.8 kg                                                          |
| Shipping weight 2x extender (camera + packaging) | The 2x extender is being shipped in a separate box of approx. 1 kg                         | The 2x extender is being shipped in a separate box of approx. 1 kg     | The 2x extender is being shipped in a separate box of approx. 1 kg     | The 2x extender is being shipped in a separate box of approx. 1 kg     | NA                                                  | NA                                                              |
| OPTIONALLY AVAILABLE                             | Extender lens (not for TS32r and TS32r Pro), soft-carrying bag (standard for Pro-versions) |                                                                        |                                                                        |                                                                        |                                                     |                                                                 |

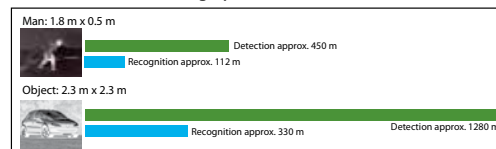
## General specifications

| IMAGING PERFORMANCE                                                                                                                               |                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Detector type                                                                                                                                     | Uncooled Focal plane array Vanadium Oxide (VOx) microbolometer                    |
| Spectral range                                                                                                                                    | 7.5 to 13.5 µm                                                                    |
| Thermal sensitivity                                                                                                                               | <50 mK at f/1.0 at +25°C                                                          |
| Image frequency                                                                                                                                   | 8.3 Hz Pal                                                                        |
| Image processing                                                                                                                                  | Digital Detail Enhancement (DDE)                                                  |
| IMAGE PRESENTATION                                                                                                                                |                                                                                   |
| Viewfinder                                                                                                                                        | LCD screen                                                                        |
| Video output                                                                                                                                      | PAL composite video; RCA jack                                                     |
| Image polarity                                                                                                                                    | White hot / black hot; selectable<br>InstAlert                                    |
| On-screen symbology                                                                                                                               | Standard                                                                          |
| POWER                                                                                                                                             |                                                                                   |
| Requirements                                                                                                                                      | 4 AA Batteries; rechargeable NiMH (included), non-rechargeable Li-Ion or Alkaline |
| Battery life                                                                                                                                      | > 5 hours on NiMH batteries - 120 hours in stand-by with NiMH batteries           |
| ENVIRONMENTAL SPECIFICATIONS                                                                                                                      |                                                                                   |
| Humidity non condensing                                                                                                                           | 5% to 95%                                                                         |
| Encapsulation                                                                                                                                     | IP67                                                                              |
| Drop                                                                                                                                              | Operational after 1 m drop onto concrete                                          |
| STANDARD PACKAGE                                                                                                                                  |                                                                                   |
| Camera, Hot Shoe, 4 Rechargeable AA Batteries, AC Power Adapter/Charger, Neck Lanyard, Operator's Manual, USB Cable, Video Output Cable, SD Card. |                                                                                   |

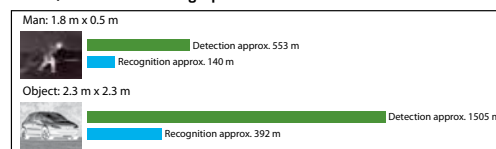
### TS24 / TS24 PRO : range performance



### TS32 / TS32 Pro : range performance



### TS24 / TS24 Pro : range performance + 2X extender lens

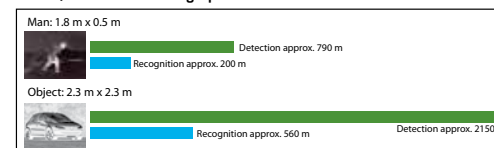


Actual range may vary depending on camera set-up, environmental conditions, user experience and type of monitor or display used.

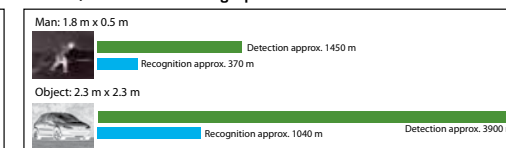
#### Asptions:

50 % probability of achieving objective at specified distance given 2°C temperature difference and 0.85 / km atmospheric attenuation factor.

### TS32 / TS32 Pro : range performance + 2X extender lens



### TS32r / TS32r Pro: range performance



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