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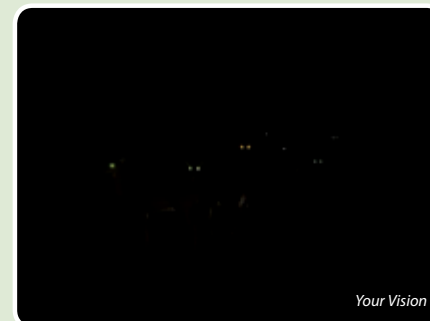
Different versions available
The TS Series is available in a Basic and a Pro version. The Pro versions contain useful features such as still image and video storage. The images and video can be used to insert in your own video or photo collection.

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.

FLIR SCOUT TS32r

FLIR SCOUT TS24

Your Vision

Thermal image

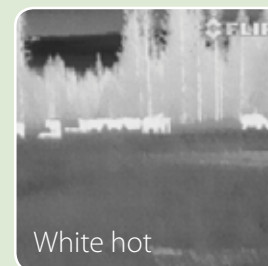*The FLIR TS-Series allows you to spot wildlife activities in total darkness.*

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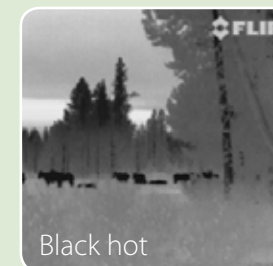
The shuttered eyepiece keeps light from coming out of the viewfinder and avoids alarming animals or other target subjects.

InstAlert™

White hot
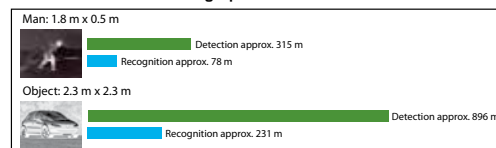
Black hot

TS-Series
Model specific specifications

◆FLIR®

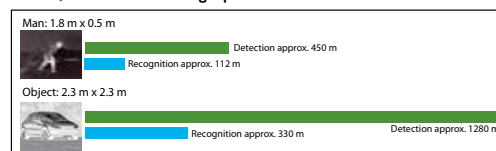| IMAGING PERFORMANCE	TS24	TS24 Pro	TS32	TS32 Pro	TS32r	TS32r Pro
Field of view	24° (H) x 18°(V) / 12°(H) x 9° (V) with 2X extender	24° (H) x 18°(V) / 12°(H) x 9° (V) with 2X extender	24° (H) x 18°(V) / 12°(H) x 9° (V) with 2X extender	24° (H) x 18°(V) / 12°(H) x 9° (V) with 2X extender	7° (H) x 5° (V)	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 1000 g with 2X extender	653 g with batteries 1000 g with 2X extender	653 g with batteries 1000 g with 2X extender	653 g with batteries 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 265 x 85 x 75 mm with 2x extender	240 x 85 x 60 mm without extender 265 x 85 x 75 mm with 2x extender	240 x 85 x 60 mm without extender 265 x 85 x 75 mm with 2x extender	240 x 85 x 60 mm without extender 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 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

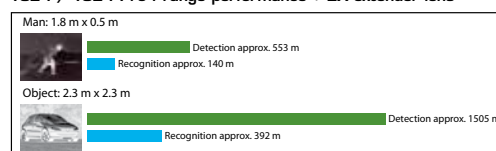|	
	Camera, Hot Shoe, 4 Rechargeable AA Batteries, AC Power Adapter/Charger, Neck Lanyard, Operator's Manual, USB Cable, Video Output Cable, SD Card.

TS24 / TS24 PRO : range performance

Man: 1.8 m x 0.5 m
Detection approx. 315 m
Recognition approx. 78 m

Object: 2.3 m x 2.3 m
Detection approx. 896 m
Recognition approx. 231 m

TS32 / TS32 Pro : range performance

Man: 1.8 m x 0.5 m
Detection approx. 450 m
Recognition approx. 112 m

Object: 2.3 m x 2.3 m
Detection approx. 1280 m
Recognition approx. 330 m

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

Man: 1.8 m x 0.5 m
Detection approx. 553 m
Recognition approx. 140 m

Object: 2.3 m x 2.3 m
Detection approx. 1505 m
Recognition approx. 392 m

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

Man: 1.8 m x 0.5 m
Detection approx. 790 m
Recognition approx. 200 m

Object: 2.3 m x 2.3 m
Detection approx. 2150 m
Recognition approx. 560 m

TS32r / TS32r Pro: range performance

Man: 1.8 m x 0.5 m
Detection approx. 1450 m
Recognition approx. 370 m

Object: 2.3 m x 2.3 m
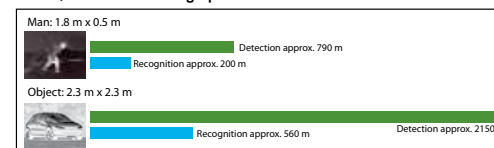Detection approx. 3900 m
Recognition approx. 1040 m

Actual range may vary depending on camera set-up, environmental conditions, user experience and type of monitor or display used.
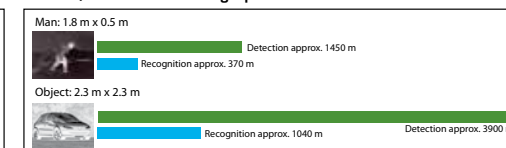
Asptions:
50 % probability of achieving objective at specified distance given 2°C temperature difference and 0.85 / km atmospheric attenuation factor.

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