

Portable thermal imaging cameras for emergency services and fire fighting support.



FLIR HF-324

## HF-Series

Portable thermal imaging cameras for firefighting support use

FLIR HF-307

The HF-Series are light weight handheld thermal imaging cameras that can be used for firefighting applications.

Thermal imaging cameras do not need any light whatsoever to create a crisp image. Firefighters also see through smoke. With a thermal imaging camera you can remotely assess the effectiveness of ongoing firefighting activities, assist with the direction of extinguishing activity even in smoke filled areas outside, find your way around in the ever-growing smoky environment due to extinguishing efforts and/or in areas already extinguished but filled with residual smoke.

A thermal imaging camera will also give you useful information about parts of a fire that are still hot. These areas need to be extinguished again in order to prevent spontaneous recombustion.

### Extremely affordable

From now on, every fire-fighter can be equipped with a thermal imaging camera.

### Crisp thermal images

The HF-Series produce thermal images of 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.

### Temperature measurement

The HF-Series is equipped with a spot temperature meter. An indication of the temperature in the middle of the image is given on the temperature scale on the left of the thermal image. If the temperature exceeds 150°C, the top part of the temperature scale turns red. A

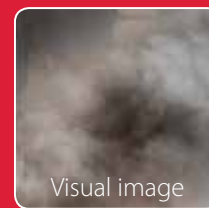
clear indication that a fire is burning, that a wall is hot and a fire is burning behind the wall or that a part of the fire is not well extinguished.

### Choice of lenses

The HF-324 is equipped with a 19 mm lens providing a 24° field of view. It offers an excellent combination of range performance and situational awareness. For longer range performance, the HF-324 can be equipped with a 2X extender which offers a 12° field of view. Users that want to see farther can choose for the HF-307. Equipped with a 65 mm lens, providing a 7° field of view.

### Easy-to-operate

Ergonomic and easy-to-use, the HF-Series are fully controlled with just 5 buttons on top of the unit.

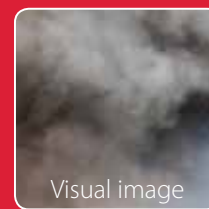


Visual image

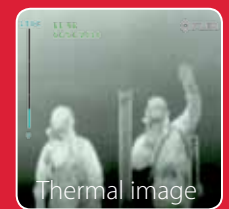


Thermal image

*Thermal imaging cameras can easily see through smoke.*



Visual image



Thermal image

*Thanks to their ability to see through smoke and in total darkness, thermal imaging cameras can help firefighters tremendously.*

### Different versions available

The standard version of the HF-Series will help firefighters see through smoke.

The Pro version of the HF-324 and HF-307 comes with a number of useful features such as:

- Image storage for evidence gathering
- Video storage
- 4x digital zoom
- Fusion color palette
- Real-time clock
- Soft-carrying bag included

## Technical specifications

### CAMERA SPECIFIC

IMAGING PERFORMANCE	HF-324	HF-324 Pro	HF-307	HF-307 Pro
Field of View	24° (H) x 18°(V) with 19 mm lens	24° (H) x 18°(V) with 19 mm lens	7° (H) x 5°(V) with 65 mm lens	7° (H) x 5°(V) with 65 mm lens
Field of view with 2X extender	12.0° (H) x 9°(V) with 19 mm lens	12.0° (H) x 9°(V) with 19 mm lens	N/A	N/A
Focus	Fixed - Manual with 2x extender	Fixed - Manual with 2x extender	Manual	Manual
Electronic zoom	2x	4x	2x	4x
IMAGE PRESENTATION				
Image Polarity	White hot / black hot; selectable	White hot / black hot / fusion; selectable	White hot / black hot; selectable	White hot / black hot / fusion; selectable
IMAGE STORAGE				
Freeze on capture	Yes	N/A	Yes	N/A
Format	N/A	Standard JPEG - 2 GB SD-card	N/A	Standard JPEG - 2 GB SD-card
Storage functions	N/A	Single image	N/A	Single image
VIDEO STORAGE				
Format	N/A	MPEG4 - 2 GB SD-card	N/A	MPEG4 - 2 GB SD-card
Storage functions	N/A	9Hz, full frame up to limit of SD-card, approx. 8 seconds / MB	N/A	9Hz, full frame up to limit of SD-card, approx. 8 seconds / MB
INTERFACES				
SD-card	N/A	1 slot	N/A	1 slot
USB2	N/A	Image transfer to PC	N/A	Image transfer to PC
PHYSICAL CHARACTERISTICS				
Camera weight incl. Lens and batteries	660 grams 970 grams with 2x extender	660 grams 970 grams with 2x extender	1000 grams	1000 grams
Camera size (L x W x H)	240 mm x 85 mm x 60 mm 265 mm x 85 mm x 75 mm with 2x extender	240 mm x 85 mm x 60 mm 265 mm x 85 mm x 75 mm with 2x extender	260 mm x 84.5 mm x 66.5 mm	260 mm x 84.5 mm x 66.5 mm
Shipping weight (camera + packaging)	2 kg	3 kg	2.8 kg	2.8 kg
Shipping size (camera + packaging) (L x W x H)	420 mm x 155 mm x 250 mm	420 mm x 265 mm x 250 mm	450 x 280 x 180 mm	450 x 280 x 180 mm
STANDARD PACKAGE				
	Thermal imaging camera, 4 rechargeable batteries, hot shoe charging and video output attachment, Video output cable, AC charger, lanyard, manual	Thermal imaging camera, 4 rechargeable batteries, hot shoe charging and video output attachment, Video output cable, AC charger, lanyard, manual, soft carrying bag, 2 GB-SD card.	Thermal imaging camera, 4 rechargeable batteries, hot shoe charging and video output attachment, Video output cable, AC charger, lanyard, manual	Thermal imaging camera, 4 rechargeable batteries, hot shoe charging and video output attachment, Video output cable, AC charger, lanyard, manual, soft carrying bag, 2 GB-SD card.
OPTIONALLY AVAILABLE				
	2x extender lens Soft-carrying bag	2x extender lens	N/A Soft-carrying bag	N/A

### GENERAL

IMAGING PERFORMANCE	
Detector type	Focal plane array, uncooled Vanadium Oxide (VOx) Microbolometer: 320 x 240 pixels
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	Built-in display - Color QVGA LCD
Video output	PAL composite video; RCA jack PAL composite video; RCA jack
POWER	
Requirements	4 AA Batteries; rechargeable NiMH, non rechargeable Li-Ion or Alkaline
Battery life	> 5 hours on NiMH batteries - 120 hours in stand-by with NiMH batteries
ENVIRONMENTAL SPECIFICATIONS	
Operating temperature range	-20°C to +60°C
Storage temperature range	-40°C to +75°C
Humidity non condensing	5% to 95%
Encapsulation	IP67
Drop	Operational after 1 meter drop onto concrete



All versions of the HF-Series can see through smoke and find people in a smoke filled room. The Pro versions are also equipped with the "Fusion" color palette.

#### Note:

The HF-Series are not specifically designed to meet the requirements of NFPA 1801 or similar international standards specifically for firefighting thermal imaging cameras carried into extreme and direct areas of fire hazard. HF-Series meets only the specifications noted above and is intended for use as a support tool in smoke filled and less extreme areas, to aid staff in the provision of efforts outside of the fire hazard zone and/or for investigating areas already extinguished yet difficult to navigate due to smoke, light steam, poor lighting or other light restricting conditions. The HF-Series are not intended for use with a mask and fire fighting helmets. With a thermal imaging camera you cannot see through glass, walls and water.

**FLIR Commercial Systems BV**  
Charles Petitweg 21  
4847 NW Breda  
The Netherlands  
Phone : +31 (0)765 79 41 94  
Fax : +31 (0)765 79 41 99  
e-mail : flir@flir.com  
www.flir.com

**FLIR Systems, Inc**  
CVS World Headquarters  
70 Castilian Drive  
Santa Barbara, CA 93117  
USA  
Phone : + 1 805 964 9797  
Fax : + 1 805 685 2711  
e-mail : sales@flir.com

**FLIR Systems Ltd.**  
United Kingdom  
Phone : +44 (0)1732 220 011  
Fax : +44 (0)1732 220 014  
e-mail : flir@flir.com

**FLIR Advanced Thermal Solutions**  
France  
Phone : +33 (0)1 60 37 01 00  
Fax : +33 (0)1 64 11 37 55  
e-mail : flir@flir.com

**FLIR Systems AB**  
Spain  
Phone : +34 91 573 48 27  
Fax : +34 91 573 58 24  
e-mail : flir@flir.com

**FLIR Systems AB**  
Sweden  
Phone : +46 (0)8 753 25 00  
Fax : +46 (0)8 753 23 64  
e-mail : flir@flir.com

**FLIR Commercial Vision Systems**  
China  
Phone : +86 (0)10 5869 9786/8762  
Fax : +86 (0)10 5869 8763  
e-mail : flir@flir.com

**FLIR Systems Middle East FZE**  
Dubai - United Arab Emirates  
Phone : + 971 4 299 6898  
Fax : + 971 4 299 6895  
e-mail : flir@flir.com

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