

## Portable thermal imaging cameras for firefighting support use



### HF-Series

Portable thermal imaging cameras  
for firefighting support use

The HF-Series are rugged 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. And maybe even more important for firefighters, they can 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

The HF-Series are extremely affordable units. 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.

#### 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.

#### Digital zoom

A 2X digital zoom allows you to have an even closer look at the situation when necessary.

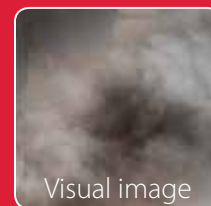
#### Extremely portable and rugged

Weighing 660 grams, batteries included, the H-Series are extremely compact and extremely light systems.

They are ideal for go-anywhere operations, in all circumstances. They are IP67 rated and operate between -20°C and +60°C.

#### Easy-to-operate

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



Visual image



Thermal image

*Thermal imaging cameras can easily see through smoke.*



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

placed, all buttons are right underneath your fingertips.

#### Different versions available

Both the HF-324 and HF-307 are available in different versions.

The standard version of the HF-Series contains a lot of features that are useful for firefighters. It will help them see through smoke in practically all weather conditions.

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
- USB2 connection
- Real-time clock

# HF-Series



## Technical specifications

	HF-324	HF-307
<b>IMAGING PERFORMANCE</b>		
Detector type	Focal plane array, uncooled Vanadium Oxide (VOx) Microbolometer: 320 x 240 pixels	
Spectral range	7.5 to 13.5 µm	
Field of view	24° (H) x 18° (V) with 19 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	NA
Thermal sensitivity	<50 mK at f/1.0 at +25°C	
Image frequency	8.3 Hz Pal / 7.5 Hz NTSC	
Focus	HF-324: Fixed - HF-324 with 2X extender and HF-307: Manual	
Electronic zoom	2X	
Image processing	Digital Detail Enhancement (DDE)	
<b>IMAGE PRESENTATION</b>		
Viewfinder	Built-in display - Color QVGA LCD	
Video output	NTSC or PAL composite video; RCA jack	NTSC or PAL composite video; RCA jack
Image Polarity	White hot / black hot; selectable	White hot / black hot; selectable
<b>POWER</b>		
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	
<b>ENVIRONMENTAL SPECIFICATIONS</b>		
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	
<b>PHYSICAL CHARACTERISTICS</b>		
	<b>HF-324</b>	<b>HF-324 with extender</b>
Camera weight incl. Lens and batteries	660 grams	970 grams
Camera size (L x W x H)	240 mm x 85 mm x 60 mm	265 mm x 85 mm x 75 mm
Shipping weight (camera + packaging)	2 kg	2 kg
Shipping size (camera + packaging) (L x W x H)	420 mm x 155 mm x 250 mm	420 mm x 155 mm x 250 mm
Shipping weight (2X extender + packaging)	-	The 2X extender is being shipped in a separate box of approx. 1 kg
<b>PRO Version only</b>		
<b>IMAGE STORAGE</b>		
Format	Standard JPEG - 1 GB SD-card	
Storage functions	Single image	
<b>VIDEO STORAGE</b>		
Format	MPEG4 - 1 GB SD-card	
Storage functions	9Hz, full frame up to limit of SD-card, approx. 8 seconds / MB	
<b>INTERFACES</b>		
SD-card	1 slot	
USB2	Image transfer to PC	
<b>PHYSICAL CHARACTERISTICS (PRO)</b>		
	<b>HF-324 Pro</b>	<b>HF-324 with extender Pro</b>
Camera weight incl. Lens and batteries	660 grams	970 grams
Camera size (L x W x H)	240 mm x 85 mm x 60 mm	265 mm x 85 mm x 75 mm
Shipping weight (camera + packaging)	3 kg	3 kg
Shipping size (camera + packaging) (L x W x H)	420 mm x 265 mm x 250 mm	420 mm x 265 mm x 250 mm
Shipping weight (2X extender + packaging)	-	The 2X extender is being shipped in a separate box of approx. 1 kg
<b>Standard Package:</b>	HF-307 or HF-324 handheld thermal imaging camera, 4 rechargeable batteries, hot shoe charging and video output attachment, Car power adaptor, Video output cable, AC charger, lanyard, manual	
<b>Optionally available:</b>	Extra for Pro Version: 1 GB SD-card, USB cable, carrying bag 2X extender ring (for HF-324 only), pelican case upgrade	

### 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.



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