



# DDoactics Nighthawk VOX-FX PRO Thermal Imaging Camera

## Product Images



## Short Description

The Nachtfalke VOX-FX PRO by DDoactics sets new standards in the range of the compact handheld thermal imaging cameras!

Nachtfalke VOX-FX PRO 17µm Pitch Thermal Imaging Camera not only offers images rich in detail but also convinces through its high performance - detection of thermal sources is possible on up to 1,250m. The VOX-FX PRO is well equipped for field stalk hunts.

Thanks to the effective VOx detector with 17µm pitch the device is also especially suited for an after-search. Manual focussing of the 35mm objective diameter allows for an optimal adjustment to any area.

## Description

The Nachtfalke ('Nighthawk') VOX-FX PRO by DDoactics sets new standards in the range of the compact

handheld night vision scopes / thermal imaging cameras!

- Range of 1250m depending on the temperature
- 2.5x optical magnification
- 2x and 4x digital zoom
- 35mm objective lense with manual focussing
- 50Hz image frequency for shake-free images in real time
- 4 image modes: black, white, red and full colour
- WiFi function enables a cable-free live transmission of up to 40m
- Drone-suited thanks to long WiFi range
- Recording function (video/image) in the device
- 8GB memory for over 10,000 images or 4 hours of video
- Integrated Li-On battery
- Minimum 4 hours of continuous use
- Charging via standard USB
- Ability to connect a battery pack
- Ultra-compact and watertight IP66 protection class
- Field of view of 11 x 8°
- Comes with tripod adapter
- Deliverable inside the EU without being subject to authorisation.

## Want Some Helpful Advice?

Call **01243 558280**, click on the webchat box below, or fill out our [contact form](#).

## Nachtfalte VOX-FX PRO 17µm Pitch Thermal Imaging Camera

Not only offers images rich in detail but also convinces through its high performance - detection of thermal sources is possible on up to 1,250m. The VOX-FX PRO is well equipped for field stalk hunts. Thanks to the effective **VOx detector with 17µm pitch** the device is also especially suited for an after-search. Manual focussing of the 35mm objective diameter allows for an optimal adjustment to any area.

### Find fawns before your mower does

Thanks to the WiFi technology used for the VOX-FX PRO, this device can also be used in combination with a drone to save wild game. Fawns can be found quickly and efficiently from the air with the thermal imaging camera. This can prevent the suffering of fawns which die every year because of mowing machines.

### Advantages of thermal imaging detectors with VOx (Vanadium Oxid)

With the efficient VOx sensor, the VOX-FX PRO has a better thermal conduction coefficient than the IRS0 which has with ASI sensors (amorphous silicium), and as such can transfer photons faster. That way it has clearly superior performance compared to conventional detectors.

### How do we define efficiency?

Efficiency is determined by the temperature sensitivity of the detector and thus by the carrier material. The indicator is the NETD (Noise Equivalent Temperature Difference). The evaluation of the noise is defined by the radiation necessary to generate an outgoing signal which is identical to the detector base noise or simply put: it defines the minimally measurable temperature difference.

### Does this make a difference, even if the resolution of the sensor stays the same?

Let's compare this with the sensor of a digital camera; two cameras have two different sensors with the same amount of megapixels. Despite this the information quality of the sensors can be completely different. A good camera can produce a great image under the defined resolution and the less efficient camera produces a worse image with the same resolution. A higher temperature sensitivity of the detector signifies more information in the same space and a sharper image richer in details and contrasts for the user. The range and accuracy during zooming are also clearly improved. If we compare an ASI with a VOx optics having identical lenses (f-number) and resolution, the VOx optics has a three times higher temperature sensitivity. (VOx = 0.039 kelvin compared to 0.1 kelvin = ASI, at 25C° and f=1).

### Other advantages of VOx sensors:

- no burn-in e.g. under direct sunlight
- less error pixels
- low noise, and thus better image quality
- generally higher temperature sensitivity
- lower power consumption
- shorter "pixel targeting".

### This is why all US weapons programmes use VOx detectors.

### Excellent technical qualities

The VOX-FX PRO thermal imaging device works with a 50Hz image frequency and thus provides absolutely shake-free images. Heat sources can be displayed in four different modes (heat black, white, red or in full colour). The VOX-FX PRO has a 2.5x optical magnification and two digital zoom steps (2x and 4x). Live images can be transmitted to a mobile end device (tablet or smartphone with iOS or Android) via WiFi or stored in internal memory (images and videos). The internal memory is 8GB, which is large enough for 10,000 images or four hours of video. Power is supplied by an integrated lithium-ion battery which allows for continuous use of four hours. It can also be powered by external power supply via USB.

A short press of the ON/OFF button activates the standby mode. The device is immediately ready to use. The stand-by function prolongs the running time of the device. The Nachtfalte VOX-FX PRO is certified under IP66 and protected against dust and water.

### DDoptics "TIS" smartphone app for image transmission

The DDoptics "Thermal Imaging System" app (TIS) allows for a live transmission of image and video signals directly to mobile devices (Android/iOS). There, sequences and images can be recorded appropriately. The app for Apple devices can be [downloaded from the App Store](#). The app for Android devices can be [downloaded from the Google Play Store](#). Attention: On some devices there can be a slight delay during the transmission.

### Thermal imaging to detect unauthorised persons

The VOX-FX PRO is also a useful tool for building and terrain surveillance and for police observations. With the VOX-FX PRO it can be determined quickly if there are unauthorised persons in an area. Hiding behind the vegetation is almost impossible.

## Technical Details

Weight	500 g
Weight (with battery)	not available with thermal imaging cameras
Weight (with battery and accessories)	not available with thermal imaging cameras
Material	N/A.
Colour	N/A.
Resolution	N/A.
Resolution	384 x 288 pixel VOx detector
Objective diameter	25mm
Pitch	17µm
Range	1,325m
Frame rate / Refresh rate	50 HZ
Display	384 x 288 pixel VOx Detector / OLED Display - 1024 x 768
Enlargement	1-2
Recording	internal (video / image) / 8 GB of memory
Image transfer	Intern / WiFi
Power supply	Integrated Li-on battery
Dimensions (h / b / t)	74 x 66 x 189 mm

## Conditions for Delivery Outside the EU

DDoptics thermal imaging devices are freely deliverable inside the European Union according to the legal EU Dual-Use regulation. Delivery outside the EU is only possible with a written authorisation of the Federal Office for Export Control (BAFA). Thus orders from outside the EU can't be processed immediately.

Explanation

Ideal For

Professional

Power

Battery only