

# Nyxus Bird

High Resolution Thermal Imager for Mobile Operations



- 1) Securing transport infrastructure
- 2) Investigation
- 3) Site protection

## INFRA<sup>TEC</sup>.

Europe's leading specialist for infrared sensors and measurement technology

Excellent geometrical resolution (640 x 480) IR Pixel

Thermal resolution better than 0.08 K

High-resolution night vision thermal system

Integrated daylight channel with 7x magnification

Hardly-detectable laser range finder

GPS for exact target location, digital magnetic compass

Snapshot function for images and target data

Ruggedised body compliant to MIL-STD-810F

External video interface



[www.InfraTec.eu](http://www.InfraTec.eu)

Made in Germany



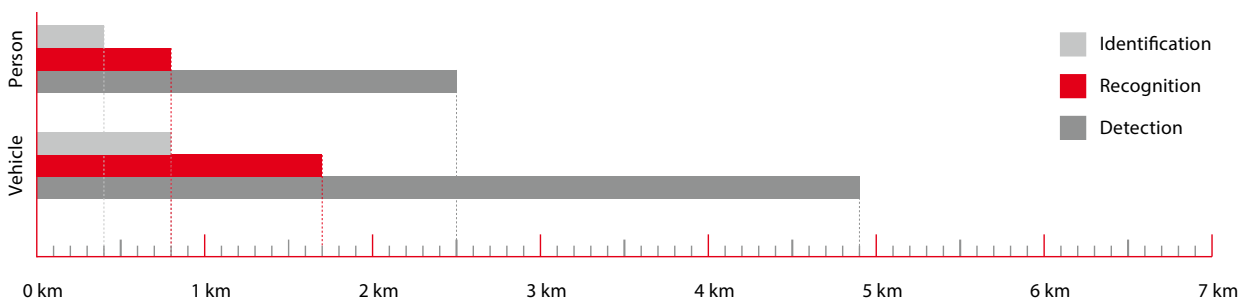
Spectral range	(8 ... 14) $\mu\text{m}$
Pitch	17 $\mu\text{m}$
Detector	Uncooled microbolometer Focal Plane Array
Detector format (IR pixels)	(640 $\times$ 480)
Temperature resolution @ 30 °C	Better than 0.08 K
Frame rate	25 / 30 Hz
Lens	55 mm (11 $\times$ 8) $^\circ$
Focus	Motorised
Electronic Zoom	2 $\times$ and 4 $\times$
Max. detection range (vehicle/human)	4.9 km / 2.5 km
Dynamic range	14 bit
Interfaces	External power supply (18 ... 32) VDC, USB 2.0, RS232
Tripod adapter	1/4" photo thread
Power supply / Autonomy	Lithium high-capacity battery / more than 8 hrs
Laser range finder (LRF), laser classification	Diode laser 1,550 nm, eye-safe, hardly detectable
Measurement accuracy LRF / Measuring range LRF	$\pm$ 2 m / (10 ... 5,000) m
Viewfinder / Type of viewfinder display (pixel)	Monocular / OLED (800 $\times$ 600)
Storage and operation temperature	(-40 ... 63) $^\circ\text{C}$ , (-32 ... 55) $^\circ\text{C}$
Housing	Dustproof / waterproof MIL-STD-810F
Dimensions, weight	(195 $\times$ 190 $\times$ 95) mm, 1.8 kg

#### Day channel (VIS)

Type	Monocular	Magnification	7 $\times$
Field of view	6.75 $^\circ$	Optical aperture	40 mm

#### Digital magnetic compass

Azimuth range/accuracy	360 $^\circ$ / < 0.3 $^\circ$	Elevation range/accuracy	65 $^\circ$ / $\pm$ 0.2 $^\circ$
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Nyxus Bird is a multi-purpose observation and reconnaissance device for demanding law-enforcement missions. Due to its unique combination of features and specifications it is an essential tool for observation tasks. With just one keystroke the operator can switch between a high-resolution thermal image and tack-sharp visual view. Both operation modes can utilise a precise laser range-finder which is invisible for image-intensifier based counter intelligence. Remote targets can be measured and localised via the integrated GPS and digital magnetic compass. The comfortable viewfinder and the ergonomical waterproof body allow long-term observing sessions even during bad environmental conditions. Mission documentation is possible by using the internal snapshot function. The USB interface allows easy video streaming and recording. A serial interface is available for PC based remote control. Depending on model, lenses with the aperture of f/1.0 will be used.

#### Standard accessories

- Protective padded carrying case, lithium high-capacity battery
- Multi-plug connecting cable (USB, RS232, external power supply)
- Handbook and quick reference guide

#### Users and fields of application

- Police, special forces, border guard, customs, security services
- Intelligence, investigation, site protection and surveillance
- Disaster relief organisation, SAR missions, mountain rescue

#### Headquarters

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