



NYXUS BIRD

Thermal Imager for Day & Night Target Acquisition

JENOPTIK | Defense & Civil Systems

ESW GmbH - Sensor Systems
Pruessingstrasse 41
07745 Jena | Germany
Phone +49 3641 65-3845 | Fax -3573
sensorsystems.dcs@jenoptik.com
www.jenoptik.com/dcs

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Multifunctional. Compact. Powerful.



Scientia potentia est. In the fields of STAR operations and situation awareness, precise & instant information about enemy targets and surrounding areas literally can be vital for successful accomplishment of your tasks. Furthermore, it optimizes the effective and efficient deployment of weapons and resources. In order to assisting your mission, NYXUS BIRD resembles the remarkable capabilities of various bird species in matters of day and night vision, target detection, localization, and orientation. NYXUS BIRD: genius like nature.

Reconnaissance = Observation + Measurement

NYXUS BIRD is a multifunctional system for day and night reconnaissance and target acquisition at, combining a thermal imager, glass optics, laser rangefinder, DMC & GPS.

Day and Night Vision

The compact NYXUS BIRD features an uncooled high resolution infrared camera for day and night vision and multiple coated glass optics with 7x magnification.

Target Measurement

The eyesafe laser rangefinder operates at a wavelength of 1550 nanometer within a maximum range of 5,000 meter. In combination with the magnetic compass and GPS receiver it warrants exact target localization.

Benefits

- Small, lightweight and handy
- Multi-functionality in one compact device
- No acoustic detection
- Night vision in absolute darkness
- Vision also through smoke and fog
- Short startup time
- Long autonomous battery operation
- detection and measurement over large distances

Applications

- Surveillance & reconnaissance
- Observation & target acquisition
- For infantry, special forces and police

Day Channel (VIS)

Type	Monocular, multiple coated glass optics
Field of view (FOV)	6.75° (118 m / 1000 m)
Magnification	7x
Optical Aperture [Ø]	40 mm

Night Channel (IR / thermal)

Sensor type	Uncooled microbolometer
Sensor resolution	384 x 288 Pixel 640 x 480 Pixel
Thermal resolution (NETD)	< 80 mK
Spectral sensitivity	8 µm ... 14 µm
Field of view (FOV)	10° x 7°
Electronic zoom	2x
Detection range (vehicles)	> 3,000 m
Recognition range (vehicles)	> 1,000 m
Start-up time	< 10 s

Laser Rangefinder

Range	maximum:	10 m ... 5,000 m
	typical:	> 3,500 m (measured with NATO standard target board, 2.3 m x 2.3 m; 30 % reflectivity; 10 km visibility)
Accuracy		± 2 m
Wavelength		1,550 nm
Laser Classification		Laser Class 1 (eye-safe, according to IEC EN 60825-1 2007-03)

Digital Magnetic Compass

Azimuth range accuracy	360° < 0.3°
Elevation range accuracy	65° ±0.2°

GPS

GPS receiver	Integrated GPS receiver module
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Display information

Reticle / target mark	LED, visible in day- and night channel
Measured data	Target position, object measurements and cloud base height in day- and night channel

Electrical

Power supply	Primary Lithium-Ion batteries or rechargeable Lithium-Ion batteries
Autonomy	> 8 hrs continuous operation (typical operation, 50% thermal imager usage, per battery set)

Interfaces

USB 2.0	Video output & device control
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Physical Dimensions

Dimensions [L x W x H]	180 mm x 150 mm x 70 mm (without ocular eyecups)
Weight	< 1.5 kg (including batteries)

Environmental

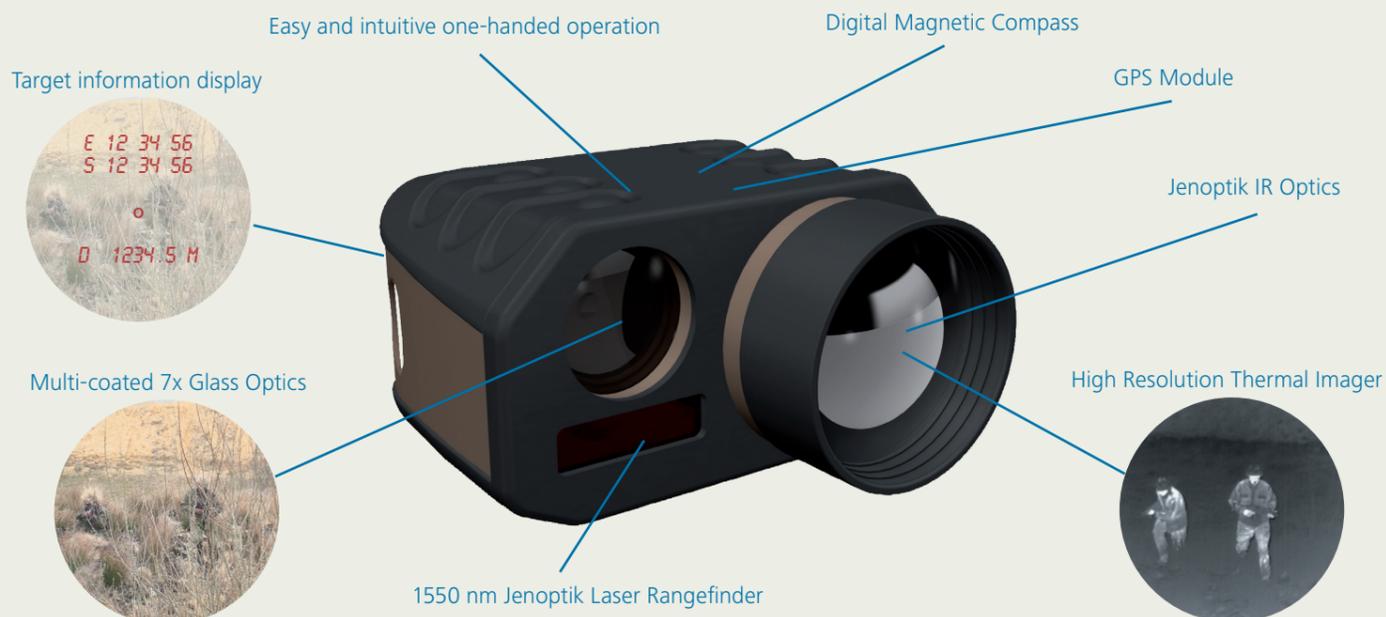
Applied standards	MIL-STD-810F
Operating temperature	-32 °C ... +55 °C
Storage temperature	-40 °C ... +63 °C

Miscellaneous

Mounting	1/4" standard tripod thread
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Accessories

Standard	Transportation bag
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Range performance thermal imager



Performance depends on meteorological conditions.