HENSOLDT **NightOwl ZM-ER**

Long range camera for surveillance applications

The surveillance camera is specifically developed for long-range observation. The combination of a large field of view for wide-area observation as well as a small field of view for target spotting offers excellent situational awareness.
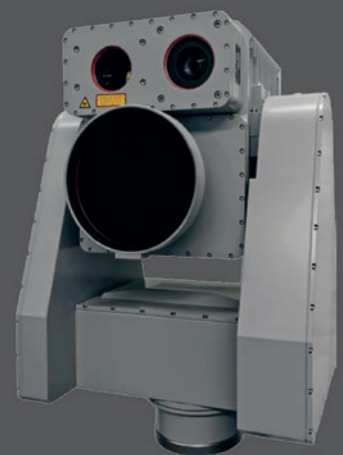
It fulfils the high requirements of land and coastal border surveillance and is equally suited for the protection of critical infrastructure.The IP-based NightOwl ZM-ER can be operated as a stand-alone unit or networked camera by means of our Management Software Z:ASSESS. It also allows integration into existing legacy operating systems.

Main Applications and Capabilities

- Land and coastal border security
- Critical infrastructure protection
- Small field of view for target spotting
- Large field of view for wide-area observation
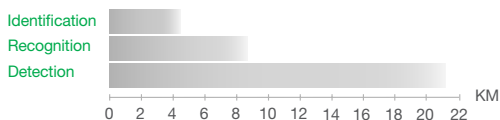- Suitable for Stationery & Mobile deployment

Benefits

- Delivers excellent situational awareness
- 360° observation range
- Thermal imager bore sighted with CMOS camera and laser rangefinder
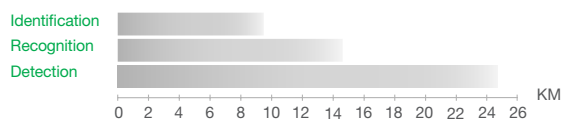- Suitable for vehicle integration

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HENSOLDT
Detect and Protect.

HENSOLDT NightOwl ZM-ER

Optical data

Thermal Imaging Camera

Imaging Sensor	Cadmium Mercury Telluride CMOS
Resolution	640 x 512 px
Spectral Range	MWIR (3 µm to 5 µm)
Detector Pitch	15 µm
Field of View (horizontal)	0.70° to 8.5°
Continuous Optical Zoom	12.3 x
Continuous Digital Zoom	up to 8x
Focal Length	64 mm to 786 mm
Focus	Manual, Automatic or Absolute Distance
Sensor Start-Up Time	< 8 min (+ 20° C)

Daylight Camera

Imaging Sensor	1/2.8" type CMOS
Resolution	1920 x 1080 px
Field of View	0.92° to 25°
Continuous Optical Zoom	30x
Continuous Digital Zoom	up to 8x
Focal Length (wide to tele)	4.3 mm to 129 mm
Focus	Manual or Automatic
Min. Illumination	≤ 0.01 lux (1 / 30 s)

Laser rangefinder

Type	Nd:YAG OPO-shifted
Wavelength	1570 nm ± 10 nm
Pulse Repetition Rate	up to 1 pulse per second
Safety Class	1M in acc. with EN 60825 / 1:2007-03
Measuring Range	50 m to 20,000 m (accuracy 1 m)
Multiple Echoes	Yes

Mechanical data

Pan and Tilt Platform

Azimuth Range / Velocity	n x 360° / 0.05° to 40° per sec
Elevation Range / Velocity	± 45° / 0.05° to 20° per sec

System Features

Video Output	H.264 over IP
Command and Control	Gigabit-Ethernet / ZEOSys
Power	18 V DC to 32 V DC MIL-STD 1275D (normal operating mode) 24 V DC recommended
Weight	appr. 59 kg
Size (H x W x D)	appr. 635 mm x 432 mm x 435 mm

Environmental conditions

Environmental test and EMC	MIL-STD-810G. DIN EN 61000-6-2:2006-03. DIN EN 61000-6-3:2011-09. IP 67

Thermal Imaging Camera Range Performance*

Identification
Recognition
Detection

0 2 4 6 8 10 12 14 16 18 20 22 KM

Human (1.8 x 0.5 m; ΔT = 5K)

Identification
Recognition
Detection

0 2 4 6 8 10 12 14 16 18 20 22 24 26 KM

Vehicle (2.3 x 2.3 m; ΔT = 5K)