



HENSOLDT NightOwl® ZM-ER

Long Range Camera for Surveillance Applications

The ITAR-free surveillance camera is specifically developed for situations requiring long-range observation.

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

Features

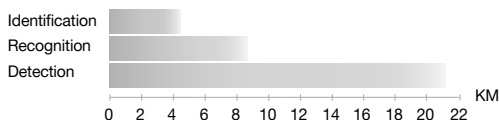
- Standard (SD) and High Definition (HD) options
- IP-based operation - stand-alone or networked
- Compact ruggedized design without external cabling
- Hermetically sealed housing
- Digital video output
- Remote diagnostic capability

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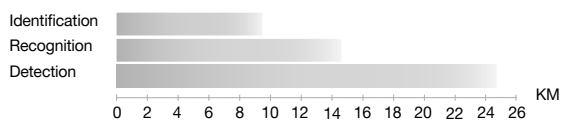
Optical data		
Thermal Imaging Camera	Standard Definition	High Definition
Imaging Sensor	Cadmium Mercury Telluride CMOS	
Resolution	640 x 512 px	1280 x 720 px
Spectral Range	MWIR (3µm to 5µm)	
Detector Pitch	15µm	10µm
Field of View (horizontal)	0.70° to 8.5°	1.05° to 11.4°
Continuous Optical Zoom	12.3 x	10.9x
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	768 x 576 px	1920 x 1080 px
Field of View	0.92° to 25°	2.3° to 60°
Continuous Optical Zoom	30x	
Continuous Digital Zoom	up to 8x	
Focal Length (wide to tele)	4.3mm to 129mm	
Focus	Manual or Automatic	
Min. Illumination	≤ 0.01 lux (1 / 30s)	
Laser rangefinder		
Type	Nd:YAG OPO-shifted	
Wavelength	1570nm ± 10nm	
Pulse Repetition Rate	up to 1 pulse per second	
Safety Class	1M in acc. with EN 60825 / 1:2007-03	
Measuring Range	50m to 20,000 m (accuracy 1 m)	
Multiple Echoes	Yes	
Mechanical data		
Pan and Tilt		
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	18V DC to 32V DC MIL-STD 1275D (normal operating mode) 24V 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*

Human (1.8 x 0.5 m; ΔT = 5K)



Vehicle (2.3 x 2.3 m; ΔT = 5K)



DRI according to Johnson Criteria.