



HENSOLDT NightOwl® M

Extreme Range Camera for Surveillance Applications

The ITAR-free NightOwl M was specifically designed for observation at extreme ranges.

Main Applications and Capabilities

- Land and Maritime border surveillance

Benefits

- Standard (SD) and High Definition (HD) options available
- Easy integration with existing systems
- Flexible service architecture
- Software and hardware upgrades
- Extreme magnification through more than 200 x continuous zoom

Features

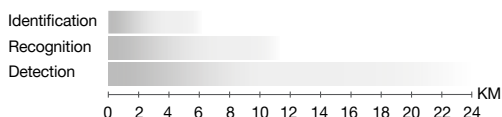
- Very large field of view for wide-area observation and detection
- Extremely small field of view for identification
- IP-based operation - stand-alone or networked
- Flexible easy to integrate ASSESS software suite

NightOwl® M

Optical Data			
Thermal Imaging Camera	Standard Definition	High Definition (15µm pitch)	High Definition (10µm pitch)
Imaging Sensor	Cadmium Mercury Telluride CMOS		Indium Antimonide CMOS
Resolution	640 x 512	1280 x 1024	1280 x 1024
Pixel Pitch	15 µm		10 µm
Spectral Range	MWIR (3 µm to 5 µm)		
Field of View (horizontal)	0.46° to 15.0°	0.92° to 30.0°	0.73° to 19.9°
Continuous Optical Zoom	33 x		27 x
Continuous Digital Zoom	up to 8 x		
Focal Length	36 mm to 1200 mm		36 mm to 1000 mm
Focus	Manual Automatic or Absolute Distance		
Sensor Start-Up Time	< 8 min (+ 20° C)		
Daylight Camera	Standard Definition	High Definition	High Definition (Option)
Imaging Sensor	1/2.8" type CMOS		1/1.8" type CMOS
Resolution	768 x 576 px	1920 x 1080 px	1920 x 1080 px
Field of View (horizontal)	0.42° to 24.1°	0.39° to 22.6°	0.4° to 26°
Continuous Optical Zoom	55 x		64 x
Continuous Digital Zoom	up to 8 x		
Focal Length	12 mm to 660 mm		16 mm to 1030 mm
Focus	Manual Automatic or Absolute Distance		
Minimum Illumination	1 lux		< 0.1 lux
Laser Rangefinder			
Type	Nd:YAG OPO-shifted		
Wavelength	1570 nm ± 10 nm		
Pulse Repitition 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 Echos	Yes		
Mechanical Data			
Pan and Tilt Platform			
Azimuth Range / Speed	n x 360° / 0.05° to 60° per sec		
Elevation Range / Speed	± 45° / 0.05° to 60° per sec		
System Features			
Video Output	H.264 over IP		
Command and Control	Gigabit-Ethernet / ZEOSys		
Power	18 VDC to 32 VDC MIL-STD 1275D (normal operating mode) 24 VDC		
Weight	appr. 88 kg		
Size (H x W x D)	appr. 1040 mm x 520 mm x 950 mm		
Environmental Conditions			
Environmental Test and EMC	MIL-STD-810G. MIL-STD-461F. IP 65		

Thermal Imaging Camera Range Performance*

Human (1.8 x 0.5 m; ΔT = 5K)



Vehicle (2.3 x 2.3 m; ΔT = 2K)

