

Z: NIGHTOWL® M

Extreme range camera for surveillance applications

The ITAR-free Z:NightOwl® M was specially designed for observation at extreme ranges. With its combination of a very large field of view for wide-area observation and detection, and an extremely small field of view for identification, it fulfills the highest requirements for the seamless surveillance of land and maritime borders. High-performance technology that you can rely on at any time.

The IP-based Z:NightOwl® M can be operated as a stand-alone or networked camera by means of our Management Software suite Z:ASSESS. It also allows integration into existing legacy operating systems.

FEATURES & BENEFITS

- Available as standard definition (SD) and high definition (HD) version
- Easy integration into existing systems
- Flexible service architecture
- Concept for software and hardware componentes
- Extreme magnification through 200 x continuous zoom
- High performance Laser Rangefinder
- SW suit for enhance operational capabilities



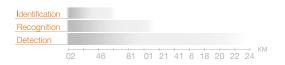
The new Sensor House



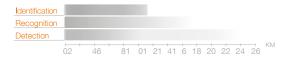
Z: NIGHTOWL® M

Optical data		
Thermal Imaging Camera	Standard Definition (SD)	High Definition (HD)
Imaging Sensor	Cadmium Mercury Telluride CMOS	
Resolution	640 x 512 px	1280 x 1024 px
Spectral Range	MWIR (3.5 μm to 5.1 μm)	
Field of View (horizontal)	0.46° to 15.0°	0.92° to 30.0°
Continuous Optical Zoom	33 x	
Continuous Digital Zoom	up to 8 x	
Focal Length	36 mm to 1200 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 (horizontal)	0.42° to 24.1°	0.39° to 22.6°
Continuous Optical Zoom	55 x	
Continuous Digital Zoom	6 x	
Focal Length	12 mm to 660 mm	
Focus	Manual and Automatic	
Min. Illumination	1.0 lux	
Laser rangefinder		
Туре	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		
Azimuth Range / Velocity	n x 360° / 0.01° to 60° per sec	
Elevation Range / Velocity	± 45° / 0.01° to 60° per sec	
System Features		
Video Output	H.264 over IP	
Command and Control	Gigabit-Ethernet / ZeO-Sys	
Power	18 V DC to 32 V DC MIL-STD 1275D (normal operating mode) 24 V DC recommended	
Weight	appr. 88 kg	
Size (H x W x D)	appr. 1039 mm x 517 mm x 951 mm	
Environmental conditions		
Environmental test and EMC	MIL-STD-810G. MIL-STD-461G and 2014 / 30 / EU. IP 65	

Thermal Imaging Camera Range Performance* Human (1.8 x 0.5 m; $\Delta T = 5K$)



Vehicle (2.3 x 2.3 m; $\Delta T = 2K$)



*DRI according to Johnson Criteria.



