



Monitoring of security zones



6x infrared zoom image



VarioCAM® HD Z security

Infrared Thermography System with 6x Infrared Zoom Lens

**1,024
x
768**
Detector

Detector Format

High resolution thermal images for monitoring large areas



Focal Length

High-performance zoom lens with 25 to 150 mm focal length



Detection Range

Detection of vehicles and persons at very large distances, up to 12.8 km



Protective Housing

Robust metal housing of various protection classes to a wide range of environmental conditions

GigE

GigE Vision Compatible

Standard interface for reliable integration of the camera into the existing process environment

The high-resolution infrared camera system **VarioCAM® HD Z security** by InfraTec is the world's first commercially available radiometric thermal imaging camera providing a **motorised 6x infrared zoom lens** for the spectral range of (7.5 ... 14) μm .

Equipped with an uncooled FPA detector, it provides brilliant 16bit **thermal images of the highest quality with (1,024 x 768) IR pixels**. This combination of HD format thermal images and the enormously efficient zoom lens opens the door to surveillance and monitoring tasks across medium and long distances with an unprecedented attention to detail for users – even in the case of adverse visual conditions and at night. The **equipment with high-quality supplementary components**, as for example ATEX-conform protective housings, pan-tilt heads as well as CCTV cameras, supports the efficient use of this system 24 hours a day.

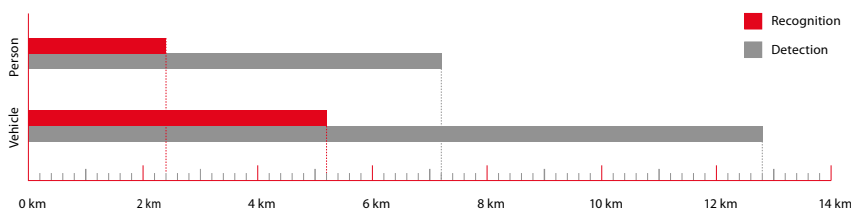
Due to different equipment options, the system can be configured just as needed for various tasks: Automatic threshold detection and signalling as well as digital real-time image acquisition via Gigabit Ethernet are just two of the numerous camera functions.

Technical Specifications

Spectral range	(7.5 ... 14) μm
Pitch	17 μm
Detector	Uncooled microbolometer focal plane array
Detector format (IR pixels)	(1,024 × 768)
Aperture ratio	f/1.4
Temperature measuring range	(-20 ... 550) °C, up to 1,200 °C
Measurement accuracy	± 5 °C or ± 5 %
Temperature resolution @ 30 °C	Better than 0.1 K
Frame rate	Full frame: 30 Hz, sub frames*: 60 Hz (640 × 480) / 120 Hz (384 × 288) / 240 Hz (1,024 × 96)
Storage media	External control computer for camera control and data acquisition*
Image storage	Time-, trigger- and temperature controlled recording of 16 bit single frames or image sequences with timestamp
Focus	Motor-driven, accurately adjustable
Zoom (optical / digital)	6× stepless / up to 32×
Lens focal length	(25 ... 150) mm
Field of view	41.5° @ 25 mm ... 6.6° @ 150 mm (HFOV)
Minimum object distance	< 5 m
Dynamic range	16 bit
Max. detection range (vehicle / person)	12.8 / 7.2 km
Max. recognition range (vehicle / person)	5.2 / 2.4 km
Interfaces	GigE Vision compatible, RS232, Trigger (TTL)
Tripod adapter	1/4" photo thread
Power supply	(12 ... 15) V DC
Storage and operation temperature	(-40 ... 70) °C, (-25 ... 50) °C
Dimensions (incl. mounting support); weight	(402 × 141 × 148) mm; 3.4 kg*
Further functions	Camera internal emissivity correction, use of various colour sets, contrast enhancement, user profile, language selection
Analysis and evaluation software	IRBIS® 3 online, IRBIS® 3 plus, IRBIS® 3 professional, IROD monitoring software

* Depending on model

By interacting with the powerful **IROD monitoring software**, an efficient and **easy-to-use 24/7 monitoring system** is created, which can also be integrated into established network structures. The extremely robust system design allows low-service continuous operation over many years, even under adverse environmental conditions such as exposure to dust, humidity, heat and cold.



Fields of application:

- Border protection
- Monitoring and protection of critical infrastructure
- Long distance reconnaissance
- Industrial plant protection, property protection



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