VarioCAM® HD Z security
Infrared Thermography System with 6× Infrared Zoom Lens

Europe’s leading specialist for infrared sensors and measurement technology

1) VarioCAM® HD Z – module with zoom lens
2) Monitoring of security zones
3) 6× infrared zoom image

Microbolometer detector with (1,024 × 768) IR pixels
Spectral range (7.5 … 14) μm
High-performance zoom lens with 25 to 150 mm focal length
Real-time imaging up to 30 Hz full-frame rate
Customised installation versions possible
Special protective housings available
Made in Germany

www.InfraTec.eu
www.InfraTec-infrared.com
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 16 bit thermal images of the highest quality with (1,024 × 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. 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.

**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 aquisition*

**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)**: 6x stepless / up to 32x

**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

**Fields of application:**
- Border protection
- Monitoring and protection of critical infrastructure
- Long distance reconnaissance
- Industrial plant protection, property protection

**Detection**

**Recognition**

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