

## VarioCAM<sup>®</sup> hr head security

Thermal Infrared Camera System for Security and Surveillance Applications

Reconnaissance



Investigation



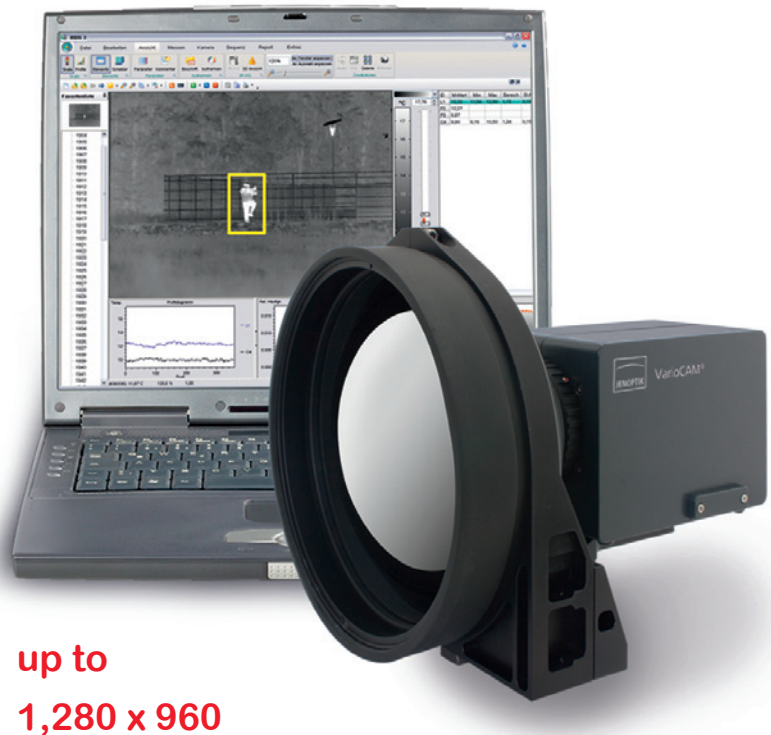
Surveillance up to 7 km



Site Protection



Investigation



up to  
**1,280 x 960**  
infrared pixels

### Features

- Uncooled FPA detector with (384 x 288) or (640 x 480) IR pixels for noiseless long-term observations
- Optomechanic microscan function ("Resolution Enhancement") provides up to (1,280 x 960) IR pixels
- Spectral range (7.5 ... 14)  $\mu\text{m}$ , perfectly designed for long ranges and 24/7 observation tasks
- Real-time thermography up to 60 Hz
- Real-time digital interface via FireWire (IEEE 1394)\* or Gigabit Ethernet\*
- Image transfer via analogue video interface
- Remote control option via serial interface
- Tough aluminum body for harsh outdoor applications (IP65)
- Different versions available (video data transmission case\*)
- Pan-tilt head and protective housing available

\* Depending on the particular camera configuration.

# VarioCAM<sup>®</sup> hr head security

## Thermal Infrared Camera System for Security and Surveillance Applications

### Technical specifications

Spectral range	(7.5 ... 14) $\mu\text{m}$
Detector type, Detector format (pixel)	Microbolometer Focal Plane Array, uncooled, (384 x 288), "Resolution Enhancement" to (768 x 576)* (640 x 480), "Resolution Enhancement" to (1,280 x 960)*
Temperature measurement range	(-40 ... 300) $^{\circ}\text{C}$ , optional > 2,000 $^{\circ}\text{C}$
Measurement accuracy	$\pm 1$ $^{\circ}\text{C}$ or $\pm 1$ % (for selected models and areas), otherwise $\pm 2$ $^{\circ}\text{C}$ or $\pm 2$ %
Temperature resolution @ 30 $^{\circ}\text{C}$	Better than 0.03 K (depending on the model); otherwise better than 0.04 K
IR-frame rate	50/60 Hz
Standard lens (object field)	1.0/25 mm (30 x 23) $^{\circ}$ with a detector of (384 x 288) pixels 1.0/30 mm (30 x 23) $^{\circ}$ with a detector of (640 x 480) pixels
Image storage	SD card, FireWire (IEEE 1394)*, Gigabit Ethernet*
Dynamic range	16 Bit
Interfaces	PAL/NTSC-FBAS, S-Video, RS232, FireWire (IEEE 1394)*, Gigabit Ethernet*
Power supply	Power adapter, FireWire (IEEE 1394)*
Operation temperature, encapsulation	(-15 ... 50) $^{\circ}\text{C}$ , IP65
Dimensions	(133 x 91 x 110) mm
Weight	1.3 kg with standard lens

\* Depending on the particular camera configuration.

The radiometric thermography system VarioCAM<sup>®</sup> hr head security is based on an uncooled Microbolometer FPA Detector with (384 x 288) or (640 x 480) IR pixels and has been designed for a wide range of security applications. With its rugged metal housing (IP65) and a choice of exchangeable lenses VarioCAM<sup>®</sup> hr head security is perfectly suited for deployed operation, covered investigation or perimeter protection.

Due to the compact dimensions VarioCAM<sup>®</sup> hr head security can be operated as stand-alone system or offers an integration into different vehicle systems. In combination with the thermoelectrically stabilised camera core the exchangeable f/1.0 Jenoptik lenses allow long-range detection, recognition or identification of persons and vehicles. Specifically customised this thermographic system also can be used for surveillance tasks which require continuous and automatic or remote operation.

### Applications

- Covered investigation by police force units
- Reconnaissance
- Surveillance by customs or border police
- Vehicle integration
- Site protection

### Lenses

Detector type (pixel)	(384 x 288) (640 x 480)		
	Focal	FOV ( $^{\circ}$ )	FOV ( $^{\circ}$ )
Wide-angle lens	12.5 mm	(57 x 44)	(65 x 51)
Standard lens	25 mm	(30 x 23)	-
Standard lens	30 mm	(25 x 19)	(30 x 23)
Telephoto lens	50 mm	(15 x 12)	(18 x 14)
Telephoto lens	75 mm	(10 x 7,5)	(12 x 9)
Telephoto lens	130 mm	(6 x 4,5)	(7 x 5,5)



Design and specifications subject to change without prior notice.

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