VarioCAM® HD head

Thermographic Solution for Use in Industry and Research


up to (2,048 x 1,536) IR pixels

InfraTec

Europe's leading specialist for infrared sensors and measurement technology
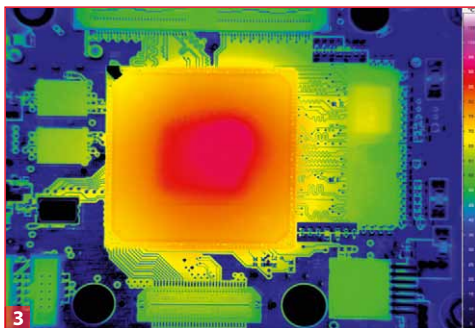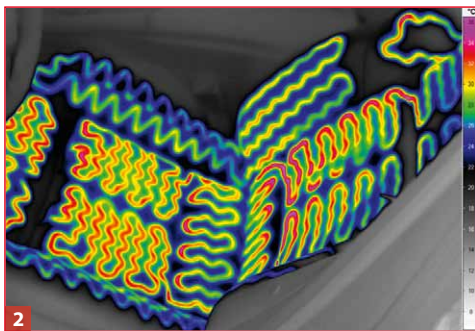
1) VarioCAM® HD head from Jenoptik
2) Seat heater
3) Board

Microbolometer detector with (1,024 x 768) IR pixels

Optomechanical Microscan with (2,048 x 1,536) IR pixels

Frame rate of up to 240 Hz, GigE Vision interface

Process- and trigger interface

Solid light metal housing (IP67)

Pixel resolution of up to 17 µm

Made in Germany

www.InfraTec.de

NEW

Spectral range	(7.5 ... 14) µm
Detector,	Uncooled Microbolometer Focal Plane Array
Detector format (IR pixels)	(1,024 x 768), optomechanical Microscan to (2,048 x 1,536)*
Temperature measuring range	(-40 ... 1,200) °C, optional > 2,000 °C
Measurement accuracy	± 1.5 °C or ± 1.5 %
Temperature resolution @ 30 °C	Better than 0.05 K
Frame rate	30 Hz (Fullframe) / 60 Hz (640 x 480) / 120 Hz (384 x 288) / 240 Hz (1,024 x 96)
Standard lens (field of view)	1.0/30 mm, (32 x 25)°
Image storage	GigE Vision, SDHC Card
Dynamic range	16 Bit
Interfaces	DVI-D, C-Video, RS232, GigE Vision
Power supply	AC adapter, PoE*
Operation temperature, encapsulation	(-15 ... 50) °C, IP54, IP67*
Dimensions	(190 x 90 x 94) mm
Weight (basic system without lens)	1.15 kg
Further Functions	Close focus*, Microscan*

* Depending on the particular camera configuration

The **thermographic high-resolution system VarioCAM® HD head** is based on an **uncooled microbolometer FPA detector** of the latest generation **with (1,024 x 768) IR pixels** and was conceived for demanding **stationary monitoring and measurement tasks.** In combination with the integrated optomechanical Microscan feature, which was designed for continuous operation, it generates image formats with geometrical resolutions of up to **3.1 Megapixels.** The VarioCAM® HD head produces **brilliant high-quality thermographic images with 16 bits,** which allows unprecedented efficiency, especially when capturing smallest details on large object surfaces. Because of the maximum frame rate of 240 Hz, **extremely quick temperature changes can be recognised reliably.** The **various sets of equipment** make it easy to adjust the setup to the respective measurement task: The application range includes automatic threshold recognition and signalling, digital realtime image acquisition via GigE, online processing of thermographic data and much more. The industrial-suited light metal housing (IP67) allows easy and inexpensive **installation in rough process environments.**

The **big temperature range**, a **complete optical assortment** as well as the extensive equipment and **powerful IRBIS® 3 software** for thermographic data acquisition and evaluation make the VarioCAM® HD head an ideal tool for **numerous applications in industry and research**. With the application-specific configuration, this stationary thermographic system is even suited for **monitoring tasks,** which require **continuous and automatic operation.**

Application examples:

- High-resolution thermography in research and development
- Monitoring and controlling of fast-running processes
- Stationary microthermography
- Security engineering and early fire detection

Lenses and close-up-lenses

Detector type (pixel)		(1,024 x 768)
Lens	Focal distance	FOV (°)
Super wide-angle lens	7.5 mm	(99 x 82)
Wide-angle lens	15 mm	(67 x 50)
Standard lens	30 mm	(32 x 25)
Telephoto lens	60 mm	(16 x 12)
Telephoto lens	120 mm	(8 x 6)
Close-up lenses	Pixel size	FOV (mm²)
Close-Up 0.6x for Telephoto lens 60 mm	28 µm	(29 x 22)
Microscopic lens 1.0x	17 µm	(17 x 13)

InfraTec GmbH
Infrarotsensorik und Messtechnik

Gostritzer Straße 61 - 63
01217 Dresden / GERMANY
phone: +49 351 871-8630
fax: +49 351 871-8727
e-mail: thermo@InfraTec.de

Further Information at: **www.InfraTec.de**