VarioCAM® High Definition
Thermographic Solution for Universal Use

Europe’s leading specialist for infrared sensors and measurement technology

Microbolometer camera with up to (1,024 × 768) IR pixels
Opto-mechanical MicroScan with up to (2,048 × 1,536) IR pixels
Frame rate of up to 240 Hz, GigE Vision interface
Integrated light-sensitive digital 8 MP camera
5.6" colour TFT display with (1,280 × 800) pixels
Laser range finder and GPS sensor
Wireless camera control and data acquisition via WLAN

1) VarioCAM® High Definition
2) Transmission
3) Photovoltaic power plant

www.InfraTec.eu
Spectral range (7.5 … 14) µm
Detector Uncooled Microbolometer Focal Plane Array
Detector format (IR pixels) (1,024 × 768), with built-in opto-mechanical high-precision scan unit (2,048 × 1,536)*
(640 × 480), with built-in opto-mechanical high-precision scan unit (1,280 × 960)*
Temperature measuring range (-40 … 2,000) °C*
Measurement accuracy ± 1 °C or ± 1 %*
Temperature resolution @ 30 °C Up to 0.02 K*
Frame rate Full-frame: 30 Hz (1,024 × 768), sub-frame formats*: 60 Hz (640 × 480) / 120 Hz (384 × 288) / 240 Hz (1,024 × 96)
Full-frame: 60 Hz (640 × 480), sub-frame formats*: 120 Hz (384 × 288) / 240 Hz (640 × 120)
Storage media SDHC Card, external control computer for camera control and data acquisition*
Image storage Time-, trigger- and temperature controlled recording of 16 bit frames or image sequences with
timestamp, video streaming in MPEG format
Realtime storage* Computer-aided storage of radiometric sequences by GigE interface with up to 240 Hz
Lens mount Bayonet to comfortably switch objectives, automatic objective detection and data transfer
Focus Motor-driven, automatic or manual, accurately adjustable, laser-supported autofocus*
EverSharp function* Multifocal recording allows for maximum extend of sharp focus
Zoom Up to 32× digital, stepless
Digital colour video camera 8 Megapixels, LED video light, vision mixer and cross-fade feature
Dynamic range 16 bit
Interfaces; Trigger* GigE Vision*, DVI-D (HDMI), C-Video, RS232, USB 2.0, WLAN*, Bluetooth*, 2 x digital I/O, 2 x analogue I/O
Tripod adapter 1/4" photo thread
Power supply Standard Lithium-Ion battery, energy save mode, AC adapter, (12 … 24) V DC
Integrated microphone and speaker Voice annotation feature, replay and audio dubbing
Laser range finder* Semiconductor laser red, laser protection class 2, range up to 70 m
Integrated GPS sensor* Image integrated storage of position data
Display 5,6" colour TFT display (1,280 × 800) pixel, 170° rotatable and 280° revolvable, daylight suited, incl. flip mirror
Colour viewfinder* Tiltable colour viewfinder with dipter compensation
Single-handed operation Intuitive operation with ergonomically arranged function keys and multifunctional joystick,
programmable keys
Protection degree; Storage and operation temperature IP54, IEC 60529; (-40 … 70) °C, (-25 … 55) °C
Impact strength; vibration resistance in operation 25 G (IEC 68 - 2 - 29); 2 G (IEC 68 - 2 - 6)
Dimensions; weight (210 × 125 × 155) mm; 1.6 kg (basic configuration with standard lens)
Automatic functions Autofocus, permanent autofocus, automatic distance indicator, distance-dependent display of pixel size to avoid geometrically related measurement errors, autoimage, autolevel, min./max. temperature alarm: visual/acoustic, alarm triggered image storage
Measurement functions 8 freely choosable, movable measurement fields / -points, automatic hot/cold spot display: globally and internally defined measurement fields, differential temperature measurement, temperature profile, histogram, differential image, isotherms display
Further functions Camera internal emissivity correction, shutter free operation, use of various colour sets, contrast enhancement, user profile, language selection, user-specific comment data base, digital voice recording
Analysis and evaluation software* IRBIS® 3, IRBIS® 3 report, IRBIS® 3 view, IRBIS® 3 plus*, IRBIS® 3 professional*, IRBIS® 3 remote HD, IRBIS® 3 control*, IRBIS® 3 online*, IRBIS® 3 process*, IRBIS® 3 active*, IRBIS® 3 mosaic*, IRBIS® 3 vision*, FORNAX 2*, FORNAX 2 plus*
* Depending on model

<table>
<thead>
<tr>
<th>Detector format (IR pixels)</th>
<th>(640 × 480)</th>
<th>(1,024 × 768)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super wide-angle lens</td>
<td>7.5</td>
<td>(93.7 × 77.3)</td>
</tr>
<tr>
<td>Wide-angle lens</td>
<td>15</td>
<td>(56.1 × 43.6)</td>
</tr>
<tr>
<td>Standard lens</td>
<td>30</td>
<td>(29.9 × 22.6)</td>
</tr>
<tr>
<td>Telephoto lens</td>
<td>60</td>
<td>(15.2 × 11.4)</td>
</tr>
<tr>
<td>Telephoto lens</td>
<td>120</td>
<td>(7.6 × 5.7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Macro and microscopic lenses</th>
<th>Minimum object distance (mm)</th>
<th>Pixel size (µm)</th>
<th>Pixel size (µm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close-Up 0.2x for 30 mm</td>
<td>70</td>
<td>75.4</td>
<td>51.3</td>
</tr>
<tr>
<td>Close-Up 0.5x for 30 mm</td>
<td>33</td>
<td>41.4</td>
<td>28.2</td>
</tr>
<tr>
<td>Close-Up 0.5x for 60 mm</td>
<td>78</td>
<td>41.6</td>
<td>28.3</td>
</tr>
<tr>
<td>Microscopic lens M=1.0x</td>
<td>50</td>
<td>25</td>
<td>17</td>
</tr>
</tbody>
</table>

Headquarters
InfraTec GmbH
Infarotsensorik und Messtechnik
Gostritzer Str. 61 – 63
01217 Dresden / GERMANY
Phone +49 351 871-8630
Fax +49 351 871-8727
E-mail thermo@InfraTec.de
USA office
InfraTec infrared LLC
5048 Tennyson Pkwy.
Plano TX 75024 / USA
Phone +1 844-226-3722 (toll free)
E-mail thermo@InfraTec-infrared.com

Further information on the internet: www.InfraTec.eu
Headquarters
InfraTec GmbH
Infarotsensorik und Messtechnik
Gostritzer Str. 61 – 63
01217 Dresden / GERMANY
Phone +49 351 871-8630
Fax +49 351 871-8727
E-mail thermo@InfraTec.de
USA office
InfraTec infrared LLC
5048 Tennyson Pkwy.
Plano TX 75024 / USA
Phone +1 844-226-3722 (toll free)
E-mail thermo@InfraTec-infrared.com

Latest information on the internet.