ImageIR® 10300
Full HD Thermography Camera

Europe’s leading specialist for infrared sensors and measurement technology

Cooled FPA photon detector with \((1,920 \times 1,536)\) IR pixels

- Full-frame rate up to 100 Hz, 10 GigE interface
- Snapshot detector, internal trigger interface
- Complete optical assortment
- Pixel size with microscopic lens up to 1.3 \(\mu m\)
- Thermal resolution better than 0.022 K

Made in Germany

1) ImageIR® 10300 with \((1,920 \times 1,536)\) IR pixels
2) Format-filling image of circuit board
3) Detailed zoom into image

www.InfraTec.eu
www.InfraTec-infrared.com
With its detector format of (1,920 × 1,536) IR pixels the ImageIR® 10300 sets new standards in geometric resolution worldwide and creates thermograms with an unprecedented image detail and sharpness. For the first time an infrared camera for civil use with a cooled photon detector permits Full HD images. In combination with the small pitch dimension of 10 µm, this ensures that measurement, inspection and surveillance tasks can be solved even more efficiently than before. For example, everywhere such very fine structures need to be analysed on large-surface measurement objects, users save time, effort and thus costs.

Despite the detector format of about 3 Megapixels, the transfer of full frame images achieves a rate up to 113 Hz. Thanks to the 10 GigE interface of the ImageIR® 10300 users can store large amounts of measurement data on a computer in the shortest amount of time. The interface is a part of the modular design of the entire high-end camera series ImageIR®. Individual adjustments like retrofitting a remotely controllable filter and aperture wheel or a motor focus unit can easily be realised. A broad variety of infrared lenses with highest optical performance parameters provides the camera’s outstanding thermal sensitivity.

Lenses | Focal length (mm) | FOV (°) |IFOV (mrad) |
-------|------------------|---------|------------|
Wide-angle lens | 25 | (42.0 × 34.2) | 0.4 |
Standard lens | 50 | (21.7 × 17.5) | 0.2 |
Telephoto lens | 100 | (11.0 × 8.8) | 0.1 |

Macroscopic lenses | Minimum object distance (mm) | Object size (mm) | Pixel size (µm) |
--------------------|-----------------------------|-----------------|----------------|
Close-up for telephoto lens 50 mm | 300 | (115 × 92) | 60 |
Close-up for telephoto lens 100 mm | 500 | (96 × 77) | 50 |
Microscopic lens M=1.0× | 40 | (19 × 15) | 10 |
Microscopic lens M=8.0× | 14 | (2.4 × 1.92) | 1.3 |

* Depending on model