ImagelR® 9300 High-end thermography camera

Benefits & Features

- Cooled FPA photon detector with (1,280 x 1,024) IR pixels
- Frame rate up to 390 Hz, GigE Vision interface
- Snapshot detector, internal trigger interface
- Extremely short integration times in the microsecond range
- Pixel resolution up to 2 µm
- Thermal resolution up to 0.025 K
- Made in Germany

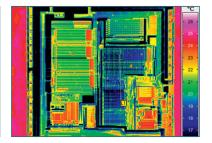




ImagelR® with microscopic lens



Controlling and acquisition software for facility protection



Microscopic thermography

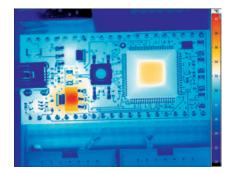


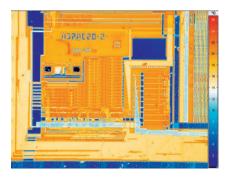
ImageIR® 9300 High-end thermography camera

With its ImageIR® 9300, InfraTec introduces another top-level thermographic camera model belonging to the ImageIR® high-end camera series. For the first time, it is equipped with a new generation cooled focal-plane-array photon detector that provides a format of (1,280 × 1,024) IR-pixels – four times higher than comparable competitive units. Combining an outstan-ding thermal resolution of 0.025 K with very high frame rates of 106 Hz and extremely short integration times of only a few microseconds, this camera offers you a whole new range of applications.

ImagelR® 9300 was developed for demanding operations in research and development, non-destructive material testing and process monitoring sectors. Its modular structure, which consists of optical-, detectorand interface-modules, makes it easily adaptable to the respective application.

An integrated trigger interface guarantees a repeatable high-precision triggering of quick procedures. Two configurable digital in- and outputs serve as control ports for the camera or as generator of digital control signals for external devices. The optical channel consists of exchangeable infrared lens systems as well as application-specific apertures, filters and optical elements. All exchangeable radiometric precision lenses of the ImageIR® can be equipped with a motorised focus unit, which is operated from the camera's application software. It allows quick, precise and remotely controllable motorised focu-sing and is a part of the optional auto-focus function.







Modular system design of ImageIR® series

Model	ImageIR® 9300
Spectral range	(2.0 5.7) µm
Pitch	15 µm
Detector	InSb
Detector format (IR pixels)	(1,280 × 1,024)
Selection mode	ITR / IWR
Detector cooling	Stirling cooler
Temperature resolution @ 30 °C	0.025 K
Frame rate (full screen mode/ half screen mode/quarter screen mode/sub-frame)*	Up to 106 / 200 / 390 / 3,200 Hz
Window mode	yes
Focus	Manually, motorised or automatically*
Dynamic range	Up to 16 bit
Integration time	(0.5 18,000) µs in increments up to 1 µs
Rotating filter wheel*	Up to 5 positions
Rotating aperture wheel*	Up to 5 positions
Multi integration time*	yes
Interfaces	GigE, 10 GigE*, 2 × CAMLink*, USB, HDMI*
Trigger	2 IN, / 2 OUT, TTL
Analog signals*, IRIG B*	1 IN, / 2 OUT, yes
Tripod adapter	yes
Storage temperature	(-40 70) °C, (-20 50) °C
Protection degree	IP54, IEC 529
Dimensions	(244 × 130 × 160) mm
Weight	4.0 kg



