

## **Book Your ImageIR®** 8300 Camera **Demo Loan**

Rent the InfraTec ImageIR 8300 camera for a week or a month at a time for your next research project at competitive rates.

If you buy a camera within 9 months of the loan, we'll take a portion of the loan cost off the purchase price.

"And now you can discover it for yourself for your upcoming research project without having to commit to buying one. We're offering you the opportunity to hire the ImageIR 8300 for a week or a month at a time."

Dr. Luke Nicholls, Technical Sales Manager, QDUKI





#### FEATURES IMAGEIR 8300:

- Outstanding thermal resolution better than 20 mK
- Integrated trigger interface guarantees a repeatable high- • Opto-mechanical precision triggering of quick procedures
- Full-frame rate up to 355 Hz in the format (640 × 512) IR pixels
  - MicroScan with (1,280 × 1,024) IR pixels

#### **IMAGEIR 8300 INFO:**

This high-speed thermography camera is an allrounder in VGA format, known as "The Flexible". Like all camera models of this series the ImageIR® 8300 hp and its cooled focal-plane array photon detector reach an outstanding thermal resolution better than 0.02 K.

The new version was developed for most demanding operations in research and development and process monitoring fields. Its modular structure consisting of the optical, detector and interface section, makes the camera easily compatible to the related applications and for tailored configurations.

#### **IDEAL FOR:**

- Analysis of Tensile Stress Samples
  Metallurgy
- Laser Based Production
- Automotive Industry
- Electronics

- Chemical Industry
- Aerospace
- Glass Industry

### Get in touch today

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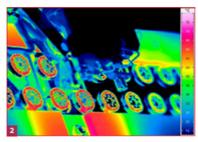


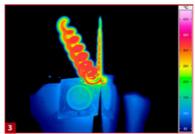
# SPECIFICATIONS | INFRATEC.



Spectral range	(2.0 5.7) μm
Pitch	15 µm
Detector	MCT or InSb
Detector format (IR pixels)	(640×512)
Image aquisition	Snapshot
Readout mode	ITR/IWR
Aperture ratio	f/3.0
Detector cooling	Stirling cooler
Temperature measuring range	(-40 1,500) °C, up to 3,000 °C*
Measurement accuracy	± 1 °C or ± 1%
Temperature resolution @ 30 °C	Better than 0.02 K
Frame rate (full/half/quarter/sub frame)*	Up to 355/670/1,200/5,000 Hz
Window mode	Yes
Focus	Manual, motorised or automatically*
Dynamic range	Up to 16 bit*
Integration time	(0.6 20,000) 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
Analogue signals*, IRIG-B*	1 IN/2 OUT, yes
Tripod adapter	1/4" and 3/8" photo thread, 2 × M5
Power supply	24 V DC, wide-range power supply (100 240) V AC
Storage and operation temperature	(-40 70) °C, (-20 50) °C
Protection degree	IP54, IEC 60529
Dimensions, weight	(244×120×160) mm*, 3.3 kg (without lens)
	* Depending on model



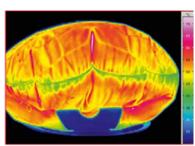




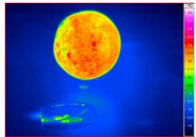
- 1) ImagelR® 8300 hp with interchangeable lenses from InfraTec
- Bonding of sensors
  Machining with a tool bit

Lenses	Focal length (mm)	FOV (°)	IFOV (mrad)
Wide-angle lens	12	(43.6 × 35.5)	1.3
Standard lens	25	(21.7 × 17.5)	0.6
Telephoto lens	50	(11.0 × 8.8)	0.3
Telephoto lens	100	(5.5 × 4.4)	0.15
Telephoto lens	200	(2.7 × 2.2)	0.08

Macro and microscopic lenses	Minimum object distance (mm)	Object size (mm)	Pixel size (μm)
Close-up for telephoto lens 50 mm	300	(58×46)	90
Close-up for telephoto lens 100 mm	500	(48 × 38)	75
Microscopic lens M=1.0×	40/195/300	(9.6 × 7.7)	15
Microscopic lens M=3.0×	22	(3.2×2.6)	5
Microscopic lens M=8.0×	14	(1.2×0.96)	1.9



Airbag test



Impact of a steel ball