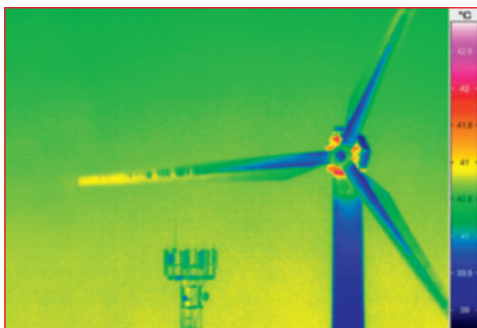
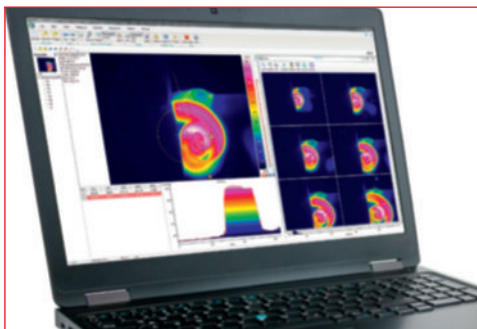


ImageIR® 8800 It

High-end Thermography Camera



- 1) ImageIR® 8800 It with interchangeable lenses from InfraTec
- 2) Software IRBIS® 3
- 3) Rotating rotor blade of a wind turbine

INFRAtec.

Europe's leading specialist for infrared sensors and measurement technology

Cooled FPA photon detector with (640×512) IR pixels

Opto-mechanical MicroScan with $(1,280 \times 1,024)$ IR pixels

Frame rate up to 14,153 Hz, GigE Vision compatible

Snapshot detector, integrated trigger interface

Extremely short integration times in the microsecond range

Thermal resolution better than 0.025 K



www.InfraTec.eu

www.InfraTec-infrared.com

Made in Germany

Spectral range	(7.7 ... 10.2) μm
Pitch	15 μm
Detector	MCT
Detector format (IR pixels)	(640 \times 512)
Image format with opto-mechanical MicroScan (IR pixels)*	(1,280 \times 1,024)
Image acquisition	Snapshot
Readout mode	ITR
Aperture ratio	f/2.0
Detector cooling	Stirling cooler
Temperature measuring range	(-40 ... 1,200) $^{\circ}\text{C}$, up to 2,000 $^{\circ}\text{C}$ *
Measurement accuracy	± 1 $^{\circ}\text{C}$ or ± 1 %
Temperature resolution @ 30 $^{\circ}\text{C}$	Better than 0.025 K
Frame rate (full / half / quarter / sub frame)*	Up to 187 / 707 / 2,397 / 14,153 Hz
Window mode	Yes
Focus	Manually, motorised or automatically*
Dynamic range	14 bit
Integration time	(10 ... 20,000) μs
Rotating aperture wheel and filter wheel*	Up to 5 positions
Interfaces	GigE, 10 GigE*, 2 \times CAMLink*, HDMI*
Trigger	3 IN / 2 OUT, TTL
Analogue signals*, IRIG B*	2 IN / 2 OUT, yes
Tripod adapter	1/4" and 3/8" photo thread, 2 \times M5
Power supply	24 V DC, wide-range power supply (100 ... 240) V AC
Storage and operation temperature	(-40 ... 70) $^{\circ}\text{C}$, (-20 ... 50) $^{\circ}\text{C}$
Protection degree	IP54, IEC 60529
Dimensions; weight	(244 \times 120 \times 160) mm*; 4.0 kg (without lens)
Analysis and evaluation software	IRBIS® 3, IRBIS® 3 view, IRBIS® 3 plus*, IRBIS® 3 professional*, IRBIS® 3 control*, IRBIS® 3 online*, IRBIS® 3 process*, IRBIS® 3 active*, IRBIS® 3 mosaic*, IRBIS® 3 vision*

* Depending on model

With its ImageIR® 8800 It, InfraTec offers another top-level thermographic camera model belonging to the ImageIR® high-end camera series. It is equipped with a **cooled LWIR-focal-plane array photon detector** that provides a **format of (640 \times 512) IR pixels** and operates in **snapshot mode**. Combining an **outstanding thermal resolution of better than 0.025 K** with very high frame rates of up to 14,153 Hz and **extremely short integration times of only a few microseconds** this camera qualifies for airborne biological and geological surveys, non-destructive testing and the analysis of fast thermal processes, which are related to large temperature measuring ranges. Its **modular structure which consists of optical, detector and interface modules** makes it easily adaptable to the respective application.

An **integrated trigger interface** guarantees a repeatable high-precision triggering of quick procedures. Multiple configurable digital in- and outputs serve as control ports for the camera or as generator of control signals for external devices. The optical channel consists of exchangeable infrared lens systems as well as application-specific apertures, filters and optical elements.

Lenses	Focal length (mm)	FOV ($^{\circ}$)	IFOV (mrad)
Wide-angle lens	13	(40.5 \times 32.9)	1.2
Standard lens	25	(21.7 \times 17.5)	0.6
Telephoto lens	50	(11.0 \times 8.8)	0.3
Telephoto lens	100	(5.5 \times 4.4)	0.15
Telephoto lens	200	(2.7 \times 2.2)	0.08

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