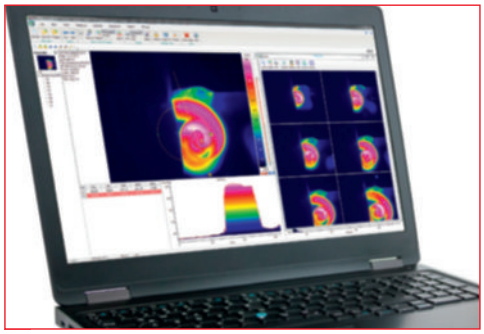
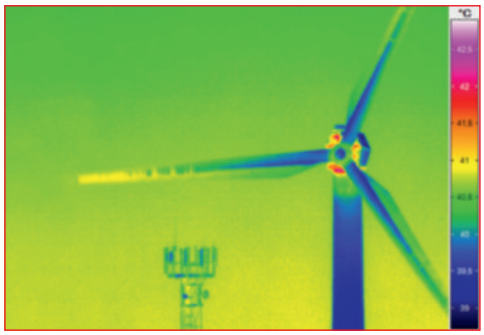
ImageIR® 8800

High-end Thermography Camera





1) ImageIR® 8800 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 × 1,024) IR pixels
Frame rate up to 14,593 Hz, GigE Vision compatible
Snapshot detector, internal 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

Latest information on the internet.

Spectral range	(7.7 … 10.2) µm
Pitch	15 µm
Detector	MCT
Detector format (IR pixels)	(640 × 512)
Image format with opto-mechanical MicroScan (IR pixels)*	(1,280 × 1,024)
Image acquisition	Snapshot
Readout mode	ITR
Aperture ratio	f/2.0
Detector cooling	Stirling cooler
Temperature measuring range	(-40 … 1,200) °C, up to 2,000 °C
Measurement accuracy	± 1 °C or ± 1 %
Temperature resolution @ 30 °C	Better than 0.025 K
Frame rate (full / half / quarter / sub frame)*	Up to 233 / 874 / 2,892 / 14,593 Hz
Window mode	Yes
Focus	Manually, motorised or automatically*
Dynamic range	Up to 16 bit
Integration time	(10 … 20,000) µs
Rotating aperture wheel and filter wheel*	Up to 5 positions
Interfaces	GigE, 10 GigE*, 2 × 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 × 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*; 4.0 kg (without lens)
Further functions	Multi Integration Time*
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, 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 × 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 14,593 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 (°)	IFOV (mrad)
Wide-angle lens	13	(40.5 × 32.9)	1.2
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

Headquarters

InfraTec GmbH
Infrarotsensorik und Messtechnik
Gostritzer Str. 61 – 63
01217 Dresden / GERMANY
Phone +49 351 82876-610
Fax +49 351 82876-543
E-mail thermo@InfraTec.de

USA office

For further information, contact us: www.techimaging.com or 978-740-0063