

Church of Our Lady Dresden, lens focal length
(28 ... 850) mm



ImageIR® 8300 / 9300 Z

Super-Zoom Thermal Imaging System

**1,280
x
1,024**
Detector

Detector Format
High resolution thermal images for
temperature measurement



Thermal Resolution
Precise detection of smallest
temperature differences



Motor Focus
Precise, remote and quick
motorised focusing



Optical Zoom
Most detailed imaging
of measurement objects



Detection Range
Detection of vehicles and persons
at very large distances

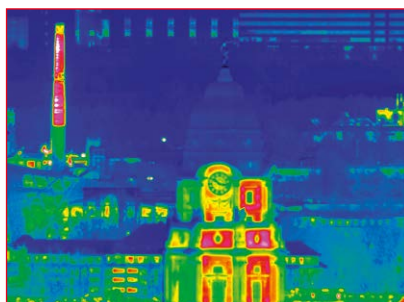
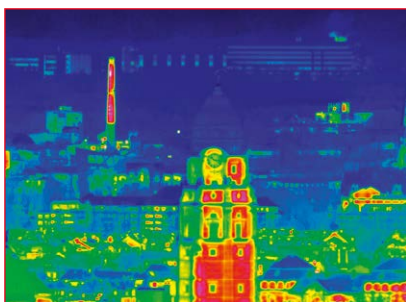
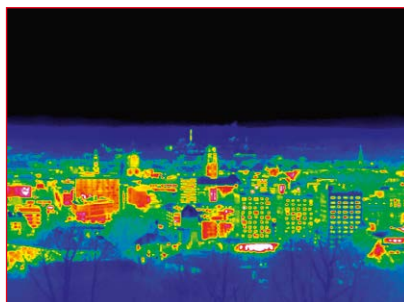
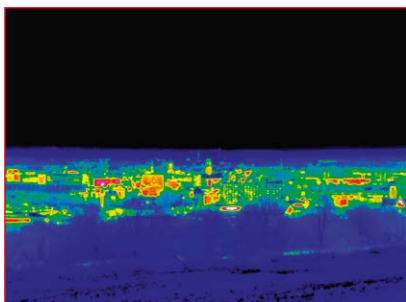
The **ImageIR® camera series** is a high-precision measurement solution that has been an indispensable tool in **high-quality research, development and automation solutions** for many years. There is more beyond high-end infrared camera series ImageIR®: The combination of this thermal imaging system with a premium **30x zoom lens facilitates complex observation and investigation**, such as border control, vehicle observation and monitoring of the environment or animals. The detection range is outstanding: vehicles can be detected up to 18 km and persons up to 15 km.

The rugged and exact **power zoom** together with the high-performance 30x zoom lens achieves a **continuously adjustable field of view** from (26.1 × 19.8)° down to (1.29 × 1.04)° with a detector format of (1,280 × 1,024) IR pixels. Therefore, also objects being far away can be displayed with a high-resolution infrared image. The camera versions ImageIR® 8300 Z and ImageIR® 9300 Z with detector formats of (640 × 512) and (1,280 × 1,024) IR pixels are available. The customisable software interface offers **time coded real-time playback**.

Technical Specifications

Spectral range	(3.6 ... 4.9) µm
Pitch	15 µm
Detector	InSb
Detector format (IR pixels)	ImagelR® 8300 Z: (640 × 512), ImagelR® 9300 Z: (1,280 × 1,024)
Image acquisition	Snapshot
Readout mode	ImagelR® 8300 Z: ITR/IWR, ImagelR® 9300 Z: IWR
Aperture ratio	f/5.5
Detector cooling	Stirling cooler
Temperature measuring range	(-10 ... 200) °C, up to 400 °C*
Temperature resolution @ 30 °C	0.02 K
Frame rate (full / half / quarter / sub frame)*	ImagelR® 8300 Z: Up to 200 / 570 / 1,000 / 4,700 Hz (14 bit); ImagelR® 9300 Z: Up to 50 / 200 / 390 / 3,400 Hz
Window mode	Yes
Focus	Motor focus with absolut focussing, autofocus*
Focusing time	300 m up to ∞: < 8.0 s
Lens focal length	(28 ... 850) mm (30× optical zoom) or (50 ... 1.350) mm
Zoom setting time	(100 ... 850) mm: < 8.0 s
Field of view	ImagelR® 8300 Z: (19,8 × 15,9)° ... (0,65 × 0,52)° ImagelR® 9300 Z: (26.1 × 19.8)° ... (1.29 × 1.04)°
Minimum object distance	(3 ... 50) m
Max. detection range (vehicle / person)	21,8/17,7 km
Max. identification range (vehicle / person)	12/6,7 km
Dynamic range*	14 bit
Integration time	ImagelR® 8300 Z: (0.6 ... 20,000) µs, ImagelR® 9300 Z: (0.5 ... 18,000) µs
Image synchronisation	Internal, IRIG-B, external
Interfaces	GigE-Vision compatible or 10 GigE**
Trigger	4 IN* / 2 OUT*
Analogue signals*, IRIG-B*	RS422 or TTL*
Tripod adapter	Standing or hanging mechanical interface 8 x M6
Power supply	(24 ... 28) VDC, (12 ... 30) VDC*
Storage and operation temperature	(-40 ... 70) °C, (-20 ... 50) °C
Protection degree	IP54, IP65*
Dimensions, weight	(360 × 240 × 270) mm, 17 kg
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



Dresden town hall, lens focal length (28 ... 850) mm

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