



More to see, less to hold

Description

Features

Regardless of whether you take photos or record videos, the newest cameras supplied by Sonel, equipped with modern uncooled focal plane array detectors measurement and high-quality lenses, ensure highly detailed images and accurate measurements. The cameras are available in several versions, thus enabling the appropriate configuration for the user's needs.

More to see, less to hold

A large display combined with innovative data processing electronics is placed in a compact housing, thus ensuring a perfect balance between high performance and small dimensions – the best choice for everyday use. Moreover, due to the centrally located navigation button supported by a menu on the touchscreen, this model ensures simple and intuitive operation.

Thermal imaging is not everything

Cameras are additionally equipped with visual lenses and related image mixing technologies: PIP, MIF. Support from the built-in LED torch and laser improves operational quality by facilitating photography and then image interpretation.

The picture is just the beginning

The built-in report module allows for the preparation and printing out of reports directly from the camera. Built-in communication interfaces ensure constant communication between the camera and the computer or mobile device, also over a wireless network. Thanks to state-of-the-art technologies and solutions, the cameras ensure full control and flexibility in various situations, and are an ideal tool for both novice users and professional thermographic inspectors.

Camera features

- high sensitivity of detectors and a wide temperature range
- **KT-400 | panoramic photos**
- **KT-400 | photos in increased resolution**
- comprehensive image analysis tools
- intuitive user interface
- IR video recording (on the SD card or computer disc)
- Automatic active temperature stabilization
- different imaging modes: IR, visual, PIP, MIF
- built-in visual camera: 5 Mpix
- built-in: LED torch, laser pointer
- interfaces: microUSB 2.0, Wi-Fi, Gigabit Ethernet, microHDMI, microSD slot



Specifications

	KT-200	KT-400
Detector resolution	192 x 144 / 25 µm VOx	382 x 288 / 25 µm VOx
Spectral range	7.5~14 µm	
Frame rate	25 Hz	
Thermal sensitivity	50 mK	40 mK
Focusing	Auto/Manual	
IFOV (standard lens)	3.45 mrad	1.29 mrad
Minimum focus distance (standard lens)	0.2 m	
Lens (field of view/focal length)	37.8° x 28.8°/7 mm (option: 14.4° x 10.8°/19 mm)	28.4° x 21.5°/19 mm (option: 57.0° x 45.0°/8.8 mm and 13.7° x 10.3°/40 mm)
Display	4", 480 x 800 px, high-quality LCD touchscreen	
Imaging mode	IR /Visual/InfraFusion MIF/PiP	
Zoom	1.1...4	
Temperature range	Range 1: -20°C...150°C -4°F...302°F Range 2: 150°C...650°C 302°F...1202°F Range 3: 650°C...1500°C 1202°C...2732°C (option)	
Accuracy	±2°C ±4°F or 2% of reading (for ambient temperatures between 15°C and 35°C and object temperature above 0°C)	
Image analysis mode	5 points, 2 lines, 5 areas. Temp. readings: min., max., mean. Isotherms. Temp. difference Alarm temp. Dew point.	
Palettes	8	
Emissivity coefficient	Adjustable from 0.01 to 1.00 or taken from the material list.	
Measurement correction	Settable distance, relative humidity, ambient (reflected) temperature	
Photo image format	JPG	
Notes to IR photos	Audio (60 seconds), text, graphic, photo.	
Report module	PDF reports, report printing through Wi-Fi	
Video file format	AVI, IRV (including information on temperature)	
Built-in functions	Visual camera 5 MPix, LED torch, laser pointer, microphone, speaker.	
Wireless communication	Wi-Fi, Bluetooth	
Interfaces	MicroSD card slot, microHDMI, microUSB 2.0	
Power supply	Li-ion battery (operating time >4 hours), built-in charger, AC 110-230 V (50/60 Hz) / 12 V power supply adapter	
Operating temperature	-10°C...50°C 14°F...122°F	
Storage temperature	-40°C...70°C -40°F...158°F	
Humidity	10%...95%	
Shock/vibration resistance	30g 11 ms (IEC 60068-2-27) / 10 Hz~150 Hz~10 Hz 0.15 mm (IEC 60068-2-6)	
Housing	IP54	
Weight	approx. 0.84 kg 1.85 lb (with battery)	
Dimensions (with standard lens and battery)	274 x 106 x 78 mm 11" x 4" x 3"	274 x 110 x 78 mm 11" x 4" x 3"

Standard accessories

	KT-200		KT-400		
	WMGBKT200V7	WMGBKT200V19	WMGBKT400V19	WMGBKT400V8X8	WMGBKT400V40
IR 7 mm lens (37.8° x 28.8°) WAADA07	✓				
IR 19 mm tele lens for KT-200 (14.4°x10.8°) WAADA019		✓			
IR 19 mm tele lens for KT-400 (28.4°x21.5°) WAADA019V400			✓		
IR 8.8 mm wide-angle lens for KT-400 (57.0°x45.0°) WAADA08X8				✓	
IR 40 mm tele lens for KT-400 (13.7°x10.3°) WAADA040					✓
Protective gloves (for operating the touchscreen) WAREK1	✓	✓	✓	✓	✓
2 x Li-Ion 7.2 V 3.2 Ah rechargeable battery WAAKU24	✓	✓	✓	✓	✓
Power supply adaptor Z13 WAZASZ13	✓	✓	✓	✓	✓
Stiffened case L16 WAFUTL16	✓	✓			
Hard carrying case L6 WAWALL6			✓	✓	✓
Hand strip WAPOZPAS4	✓	✓	✓	✓	✓
MicroUSB cable for data transmission WAPRZUSBMICRO	✓	✓	✓	✓	✓
MicroHDMI cable WAPRZMIKROHDMI	✓	✓	✓	✓	✓
MicroSD card 16 GB WAPOZMSD16	✓	✓	✓	✓	✓
User manual	✓	✓	✓	✓	✓
Factory calibration certificate	✓	✓	✓	✓	✓

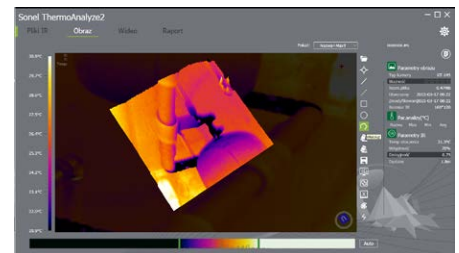
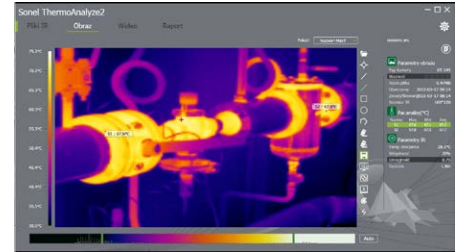
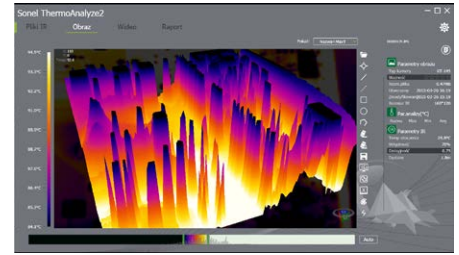
Optional accessories

KT-200 / 400 external battery charger	WAZASZ18
IR 19 mm tele lens for KT-200 (14.4°x40.8°)	WAADA019
IR 8.8 mm wide-angle lens for KT-400 (57.0°x45.0°)	WAADA08X8
IR 40 mm tele lens for KT-400 (13.7°x10.3°)	WAADA040
Lens - high temperature filter up to 1500°C for KT-200, KT-400	WAADAOF2
L6 carrying case	WAWALL6
M11 carrying case	WAFUTM11
L16 stiffened carrying case	WAFUTL16
Calibration certificate with accreditation	

Sonel ThermoAnalyze 2

A programme for analysing and reporting, included in the set of thermal imaging cameras.

- Possibility of adjusting the emissivity coefficient for the entire thermogram or its parts – the coefficient may be adjusted separately for each selected area.
- Selection of the analysed areas – marking out an area of a rectangular, oval or any other shape.
- Temperature readout at any point – after moving the cursor, temperature readout and current coordinates are presented continuously in the “Information” box; other recorded data are also available (maximum temperature, humidity, emissivity).
- Use of the InfraFusion technology – a thermogram in any palette chosen by the user is superimposed on a part of visual picture. The thermogram is superimposed with a set transparency, thus enabling optimal presentation and marking of areas of interest, especially when the visual comparison of the thermogram area and the details of visual image of the observed object is difficult.
- Determination and readout of the minimum, maximum and mean temperature for the whole area or in each selected area; segment selection (straight line or polyline).
- Easy report writing by transferring to the report all that you want to include – thermograms and corresponding visual pictures.
- Saving all characteristic points and corrections made, allowing for further analysis at a later time.
- Unlimited software licence – the programme can be used on many computers simultaneously.



Sonel KT Mobile



Mobile version of the programme supporting Sonel thermal imaging cameras. This application enables the user to view the images in real time on a mobile phone and to remotely perform many other activities by managing the camera from a mobile device.