

REMS ThermoCam 28 C/49 C

Electronic thermal imaging cameras with Connected functionality via USB

Robust, handy electronic thermal imaging cameras with Connected functionality via USB. For the determination of surface temperatures and detection of temperature differences on installations and objects. Documentation of pictures and videos with voice recording on MicroSD card. For battery and corded operation.

REMS ThermoCam 28 C

IR resolution (detector resolution)	192 × 144 pixels
Super-IR	384 × 288 pixels
Number of measuring points	27,648
Field of view (FOV)	37.2 × 27.8°

REMS ThermoCam 49 C

IR resolution (detector resolution)	256 × 192 pixels
Super-IR	512 × 384 pixels
Number of measuring points	49,152
Field of view (FOV)	50 × 37.2°

Optical camera resolution

Visual image	3,264 × 2,448 pixels (8 MP)
Video	640 × 480 pixels (SD)

Temperature range	-20 – 550°C
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Accuracy	±2°C
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NETD	< 40 mK
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Instantaneous field of View (IFOV)	3.3 mrad
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Media memory card	16 GB MicroSD card
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Image memory capacity	approx. 60,000 images
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Video memory capacity	approx. 15 hours
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REMS ThermoCam C – making heat easily visible.

Precise. Non-contact. In real time. Infra-red optics with high-resolution detector. Connectable optical camera for fusion image, image-in-image, superposed image, visual image. Numerous temperature analysis tools, individually adjustable. 8x digital zoom. Alignment laser. LED lamp.

Universal use

For non-destructive leak detection on drinking water and heating installations, detection of heating pipes, e.g. area heating systems, function testing of heating, air conditioning and ventilation systems, inspection of electrical installations and switch cabinets, early detection of thermal overloads and fire risks, troubleshooting on machines, devices and electronic components and many other applications.

Design

Compact, handy electronic thermal imaging camera, ultra light, for one-hand operation, only 660 g. Universally usable, free-hand, overhead and in confined spaces. Sturdy, impact-proof plastic housing with ergonomically shaped pistol grip with soft grip. Infra-red optics with high-resolution detector with digital signal processor for creating a thermal image (thermogram) and connectable optical camera for better detection of the environment details and contours, for easy detection of damages or measuring points. Laser for precise alignment of the thermal imaging camera. LED lamp for illumination under poor lighting conditions. Integrated microphone and integrated loudspeaker for audio recording and playback. Hinged protective cover for mechanical protection of the LED lamp of the alignment laser as well as the optical and thermal lenses. Buttons located directly underneath the display so that it is possible to hold the device by the pistol grip and operate the buttons with one hand. On/Off button. LED lamp button. Automatic image calibration button. Laser button. Selection button and 4 navigation buttons for easy menu selection. 8x digital zoom adjustable in 0.1x steps. Button for back to navigation or exit menu. Multi-function button on the pistol grip: Long press to start video recording, short press to end video recording or single image recording. MicroSD card slot, USB-C port, protective cap for connections. Connecting thread UNC ¼ for conventional camera stands. Electronic charging status check with charging state indication by 2-coloured green/red LEDs. Li-Ion 3.7V battery with 5.0 Ah capacity, for long service life. Sturdy case for thermal imaging camera, battery, rapid charger and USB cable.



Info



Display and control unit

Display and control unit with 3.5" colour display with touch function and modern TFT LCD technology, 89 mm screen diagonal, 640 × 480 pixels. User-friendly menu guidance and simple navigation. Icons with short text for fast selection of the menu items and settings. Numerous setting options for **measurements** (temperature ranges, emission factor, thermal reflection, ambient temperature, distance, external optics transfer, external optical temperature, humidity, settings for reminders, manual level and span mode), **display** (status symbol, date and time, parameters, reference list), **cameras** (detection mode (recordings at regular intervals), visual image resolution, filename header, file naming, macro mode, image rate configuration, video type, audio recording, visual storage, edit before saving, SuperIR, lamp for flashlight, colour distribution, reversed palettes) and **device** (language, unit of distance, unit of temperature, date, time, time format, rotate automatically, screen brightness, automatic switch-off, automatic rest mode, error logs, factory settings). Possibility for the user to change the factory default settings to adapt to the tasks/conditions on site. Images and videos with voice recording can be stored in user-defined folders on MicroSD card, filenames optionally with predefined prefix (header) as well as a time stamp or consecutive number, for easy documentation of the inspection result.

Battery or mains operation

Li-Ion Technology. Thermal imaging camera with exchangeable Li-Ion battery 3.7V, 5Ah. Light and powerful. High energy density for approx. 6 hours continuous operation. Operation on the mains is possible during the charging process. Cable USB-C to USB-C/A for connecting to the power supply/charger, PC or laptop. Rapid charger 100–240V, 50–60 Hz, 24W, 12V, for simultaneous charging of 2 Li-Ion 3.7V batteries, as an accessory. No memory effect for maximum battery power.

Display views

Thermal image: Heat radiated by the object (infra-red radiation) is detected and displayed as a colour-coded thermal image. Temperature differences are visualized in this way.

Fusion image: Combined view of visual image and thermal image. Thermal abnormalities in the context of the real environment are more easily recognisable, for easier object assignment and analysis.

Image-in-image: Selectable thermal image excerpt (fusion image) is superposed onto the corresponding visual image area, for better spatial orientation and focussed analysis of temperature differences.

Superposed image: Selectable thermal image in three transparency stages superposes the visual image, for good orientation and simultaneous display of temperature differences.

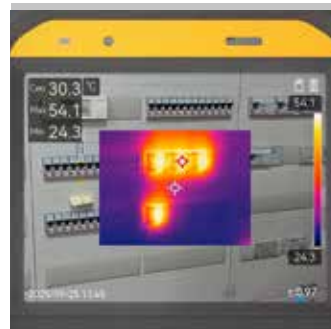
Visual image: Coloured image in the visible spectrum, without thermal information.

Temperature analysis tools

REMS ThermoCam is equipped with numerous temperature analysis tools. Up to 10 temperature measuring points can be created individually and up to 8 temperature measuring points displayed optionally in the image with temperature specification. In addition, a temperature measuring line and up to 5 temperature measuring ranges (rectangles or circles) can be created individually. Depending on the temperature analysis tool, the temperature of the measuring point or the minimum and maximum temperature as well as the average temperature of the measuring range can be displayed in the image. Display of the temperature differences between temperature measuring points, temperature measuring line or temperature measuring ranges with each other or to a settable reference value. 16 preset colour, focus and alarm palettes for fast selection of different views. Settable temperature upper limits and lower limits as well as temperature ranges for individual display of the colour-coded thermal image or display of the set temperature alarm range. Automatically or manually configurable temperature measuring ranges.

Connected functionality via USB

The data stored on the MicroSD card can be transferred easily to a PC or laptop via an existing USB connection.



Supply format

REMS ThermoCam 28 C Set. Electronic thermal imaging camera with Connected functionality via USB. For the determination of surface temperatures and detection of temperature differences on installations and objects. Documentation of pictures and videos with voice recording on MicroSD card. Temperature range -20–550°C, NETD < 40 mK, instantaneous field of view (IFOV) 3.3 mrad, IR resolution 192 × 144 pixels, Super-IR 384 × 288 pixels, number of measuring points 27,648, field of view (FOV) 37.2 × 27.8°. Infra-red optics with high-resolution detector for thermal images, optical camera for visual images. 3.5" TFT-LCD colour display with touch function 8x digital zoom. Alignment laser. LED lamp. Li-Ion 3.7V, 5 Ah battery, cable USB-C to USB-C/A, 16 GB MicroSD card. In sturdy case.

	Art.-No.	€
	176030R4	1.290,00

Supply format

REMS ThermoCam 49 C Set. Electronic thermal imaging camera with Connected functionality via USB. For the determination of surface temperatures and detection of temperature differences on installations and objects. Documentation of pictures and videos with voice recording on MicroSD card. Temperature range -20–550°C, NETD < 40 mK, instantaneous field of view (IFOV) 3.3 mrad, IR resolution 256 × 192 pixels, Super-IR 512 × 384 pixels, number of measuring points 49,152, field of view (FOV) 50 × 37.2°. Infra-red optics with high-resolution detector for thermal images, optical camera for visual images. 3.5" TFT-LCD colour display with touch function 8x digital zoom. Alignment laser. LED lamp. Li-Ion 3.7V, 5 Ah battery, cable USB-C to USB-C/A, 16 GB MicroSD card. In sturdy case.

	Art.-No.	€
	176031R4	1.950,00

Accessories

Description	Art.-No.	€
Battery Li-Ion 3.7V, 5 Ah, 19 Wh	176085R4	98,00
Rapid charger 100–240V, 50–60 Hz, 24 W, 12 V, for simultaneous charging of 2 Li-Ion 3.7V batteries.	176090R220	155,00
Cable USB-C to USB-C/A, 1.0 m long with ferrite core	176088R	31,70

