

Simplify your maintenance:
predict breakdowns with **RayCam**.

**New
infrared
camera!**

RayCam

**RUGGED
LIGHTWEIGHT
ERGONOMIC
LEAKPROOF**

IP 54



Full analysis and parameterization:

- recording capacity of 1,000 radiometric images
- supplied with RayCAM Report software

**Designed for easy measurement
whatever the environment:**

- pistol shape and multi-directional screen
- measurements from as close as 10 cm
- automatic recognition of hot and cold points

Product advantages

The RayCAM's design and the technology used to manufacture it give it a large number of advantages.

Ergonomic for easy measurement even in situations where access is difficult:

- IP 54 leakproofing
- excellent legibility in situations where access is difficult due to its multi-directional screen
- easy handling thanks to its pistol shape and light weight

Performance:

- automatic identification of hot and cold points
- adjustment of the parameters influencing the measurement:
 - adjustable emissivity
 - adjustment of the measurement distance
 - parameterization of the relative humidity and ambient temperature
- parameterizable alarms
- isotherm function
- storage capacity of 1,000 radiometric images with organization in 250 folders



A wide range of accessories for measurements in optimum conditions:



- USB connection cable to transfer the data onto a PC
- video cable for display on an external screen
- RayCAM Report software for data processing

This set of accessories is supplied as standard with your RayCAM in a rugged case.

- operation on internal batteries or mains adapter *
- sun-shade* to make the screen easy to read in bright lighting conditions
- tripod adapter* for hands-free use and operation in a fixed position

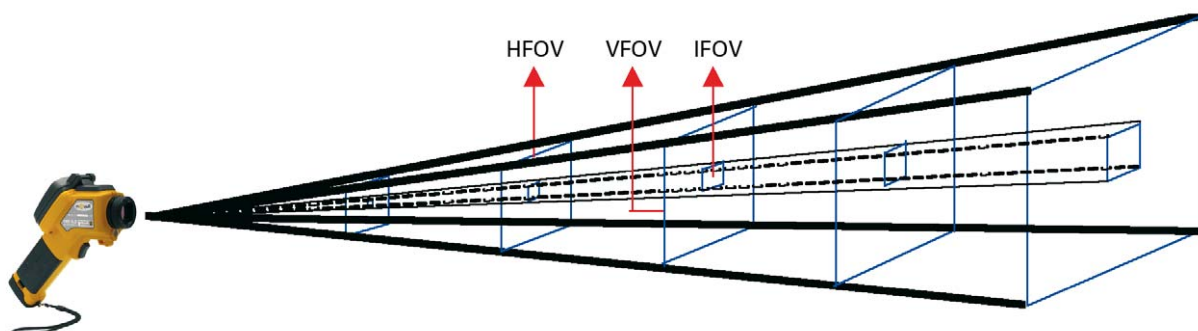
**Accessories available as an option*

Lens specifications

The RayCAM C.A 1884 is delivered with a 20° x 15°.

	IFOV spatial resolution	Minimum focusing distance	Field of view	0.1 m	0.3 m	0.5 m	1.0 m	2.0 m	6.0 m	10 m	30 m	100 m
20° x 15°	2.2 mrad	10 cm	HFOV (m)	0.03	0.10	0.17	0.35	0.70	2.11	3.52	10.57	35.26
			VFOV (m)	0.02	0.07	0.13	0.26	0.52	1.57	2.63	7.89	26.33
			IFOV (mm)	0.22	0.66	1.10	2.20	4.40	13.22	22.04	66.12	220.40
			SMO	0.66	1.98	3.30	6.60	13.20	39.66	66.12	198.36	661.20

- **HFOV** and **VFOV** represent the horizontal and vertical fields of view, respectively.
- **IFOV** corresponds to the camera's spatial resolution, i.e. what a detector sees. The IFOV of the C.A 1884 is 2.2 mRad, meaning that, at a distance of 1 m, the detector observes an area of 2.2 mm.
- **SMO** (Smallest Measurable Object): to ensure correct measurement, the target observed must cover at least three detectors, i.e. SMO = 3 IFOV.



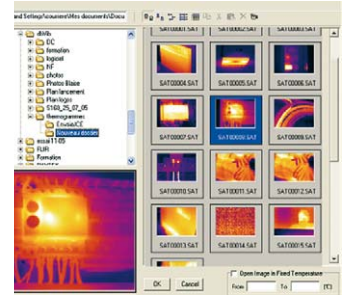
Delivered with the RayCam Report software

RayCam Report is an ideal tool for analysing the results, creating customized reports and exporting them into Word. Its interface is so simple that anyone can learn to use it very quickly.

All the **analysis** functions are accessible via the toolbar. Depending on their requirements, users can position various elements:

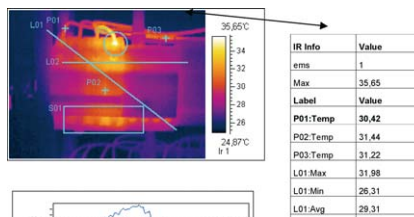
- cursors (automatic display of the temperature at the point selected)
- thermal profile (automatic display of the Min/Max/Average temperatures of the line)
- a square or circle for area analysis (ideal for Min/Max/Average temperature comparisons between terminals, for example)

The "Max" function automatically indicates the hottest point in the whole thermogram or in a predefined area of analysis.



Genuine, accurate analysis

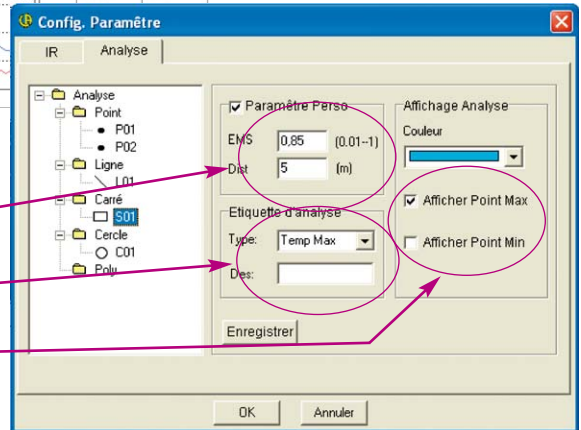
If a characteristic on the radiometric image is modified, it triggers automatic recalculation of the other values. **RayCam Report** allows the emissivity of each point in the thermogram to be parameterized, a crucial feature when the thermogram includes different materials.



Choose a different configuration for each analytical tool inserted on your thermogram.

A wide range of possibilities:

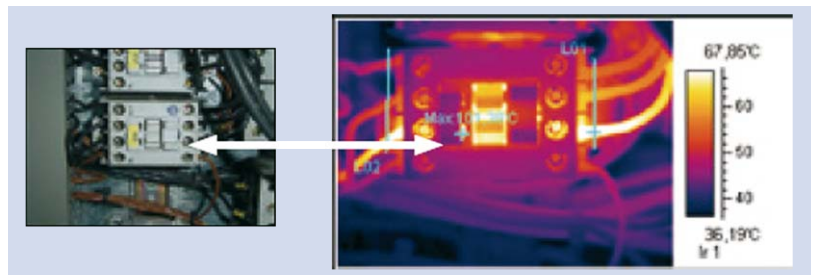
- specify a different emissivity from that of the thermogram as a whole
- display a value label next to the tool
- display the Max/Min temperature within an area of analysis



Infrared image / Real image

With the **RayCam Report** software, you can link your thermogram to a real image:

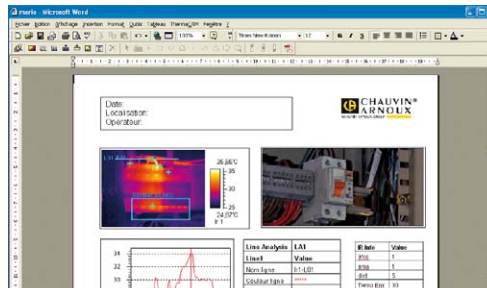
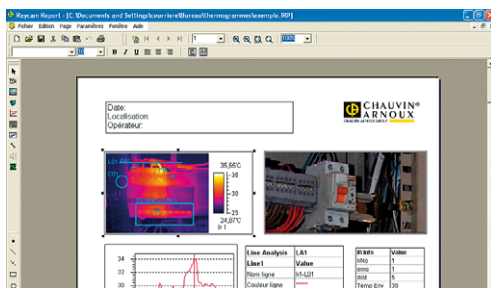
This will make it easier for you to identify the fault and the malfunction so that you can make the appropriate corrections!



Better presentation of results...

DISPLAY IN RAYCAM REPORT...

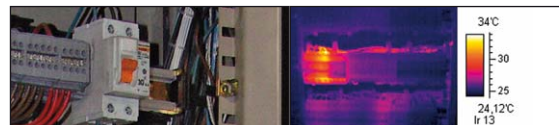
...DISPLAY IN WORD



Simplify traceability of your inspections. Reports can be exported into Word almost instantaneously. (RayCam Report is fully compatible with Open Office)

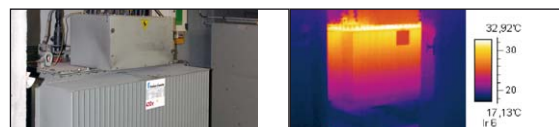
ELECTRICAL APPLICATIONS

>> Detector	
Type	UFPA Microbolometer / 7.5 ~14 micron
Resolution / Spectral band	160 x 120 / 50 Hz
>> Performance	
NETD at 30°	0.1 °C
Field of view/focusing	20° x 15°, IFOV: 2.2 mRad
Min focusing distance	0.1 m
>> Image	
Video output	Pal / NTSC
Screen	TFT 2.5" colour LCD, multi-palettes
Image function	"Live" or frozen, opening and deletion of 1,000 thermogram / 250 folders.
>> Measurements / Analysis	
Temperature range	-20 °C to +250 °C
High-temperature option	Please contact us
Accuracy	±2 °C or ±2 %
Cursor	3 positionable + 1 automatic detection
Temperature search	Automatic search for the hottest or coldest temperature in the whole image
Isotherm	Single-colour display of a parameterizable temperature interval
Adjustment	The level and scale can be adjusted automatically or manually
Correction	Emissivity, distance, ambient temperature, relative humidity
>> Software	
RayCAM report	Generation and printing of reports
>> Laser	
Wavelength	1 mW / 635 nm (red) Class II
>> Systems	
Configurations	Time, date, units, language
Power supply	7.2 V Lithium battery, 8 ~ 11 V dc
Battery life	2 hrs 30 minutes minimum
>> Specifications	
Operating temp. / Storage temp.	-25 °C ~ +50 °C / -40 °C ~ +70 °C
Relative humidity	20 ~ 90 % (IP54)
Interfaces	USB, Video output
Weight	< 700 g
Resistance to shocks	25 G according to IEC 68-2-29
Resistance to vibration	2 G according to IEC 68-2-6



Circuit-breaker

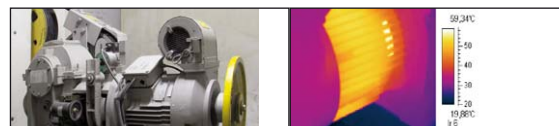
For preventive maintenance, the RayCAM enables no-contact detection of a damaged fuse or a faulty connection.



Generator

In order to avoid malfunctions leading to production stoppages and operating losses, simply check the distribution of heat in the generator and locate any faulty zones.

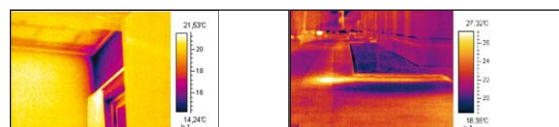
MECHANICAL APPLICATIONS



Electric motors

Measurement of a motor's surface temperature indicates anomalies and malfunctions of the internal components (bearings, gearbox, etc.) and makes it possible to react accordingly before the motor overheats.

THERMAL APPLICATIONS



Water leaks

No need to spend a fortune: water leaks in underground pipes can be detected in a single movement with the RayCAM.

Buildings

Inside a building or a home, the RayCAM can be used to monitor energy consumption by locating the losses: floor heating, poor insulation, etc.

TO ORDER

• **C.A 1884:** P01651228
Delivered in a case with the RayCAM Report software, 1 battery, 1 charger, 1 USB cable, 1 video cable

Accessories & spares

• **Sun-shade:** P01651525
• **Photo tripod adapter:** P01651526
• **Lens cover:** P01651522
• **USB cable:** P01295274
• **Battery:** P01296041
• **RayCAM Report:** P01651524
• **Mains power supply:** P01651527

• **Thermography training:** Please contact us

YOUR DISTRIBUTOR

FRANCE
Chauvin Arnoux
190, rue Championnet
75876 PARIS Cedex 18
Tel: +33 1 44 85 44 86
Fax: +33 1 46 27 95 59
export@chauvin-arnoux.fr
www.chauvin-arnoux.fr

UNITED KINGDOM
Chauvin Arnoux Ltd
Waldeck House - Waldeck Road
MAIDENHEAD SL6 8BR
Tel: +44 1628 788 888
Fax: +44 1628 628 099
info@chauvin-arnoux.co.uk
www.chauvin-arnoux.co.uk

MIDDLE EAST
Chauvin Arnoux Middle East
P.O. BOX 60-154
1241 2020 JAL EL DIB (Beyrouth)
Tel: +961 1 890 425
Fax: +961 1 890 424
camie@chauvin-arnoux.com
www.chauvin-arnoux.com