

DiaCAm Cameras: Affordable Thermographic Diagnostics

DiaCAm

Thermal Cameras



- Compact and lightweight: ergonomics designed for effortless handling
- Particularly easy to use
- Excellent thermal sensitivity: 0.08 °C
- Wide dynamic range for measurement (-20 °C to +250 °C)

**IP
54**

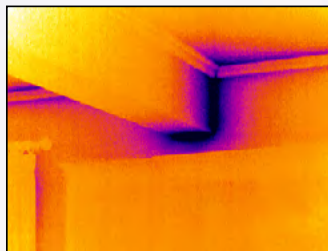
Thermal Cameras

BUILDING DIAGNOSTICS

To improve comfort or optimize a building's energy performance, thermal cameras are **powerful tools capable of detecting faults and irregularities** related to thermal bridges, thermal insulation, airtightness or problems involving water.

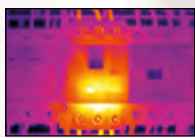


- Detection of insulation faults, air leaks, thermal bridges and excessive humidity.
- Detection of leaks, blockages and embedded ducts.



Industrial maintenance and repair

These thermal cameras are ideal for electrical maintenance, highlighting any electrical equipment malfunctions and particularly abnormal overheating.



- overloads
- unbalances
- Faulty electrical contacts

Mechanical and electrical applications

To detect anomalies or malfunctions on internal components in order to prevent motor overheating, the **DiaCams** are simple, effective tools for quick diagnostics.



The **DiaCams** can be used to check and test mechanical parts and assemblies: areas of wear, incorrect shaft alignment, lubrication problems, etc.

The advantages of the C.A 1882

With its wide-angle lens, the C.A 1882 is ideal for detecting energy losses when inspecting buildings.

It is also equipped with the MixVision function which allows you to link a thermogram to a real image.

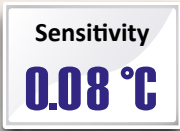
This function enables you to define how much of the infrared image is merged with the real image, using a scale from 0 to 100 %.



DiaCAM

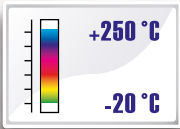


Advantages



Thermal sensitivity

The greater the thermal sensitivity, the easier it is to view small temperature differences, providing users with more detailed images. This specification is crucial, and particularly for building thermography, where some faults cause small temperature differences (e.g. insulation faults).



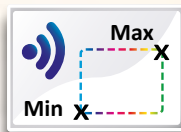
Dynamic range for measurement

The **DiaCAMs** offer a wide measurement range. The dynamic ranges for the targets may vary from -20 °C to +250 °C.



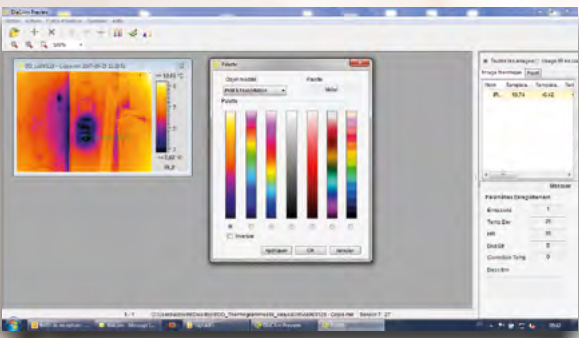
Recording

Up to 1,000 thermal images on SD cards as a standard feature.



Integrated functions

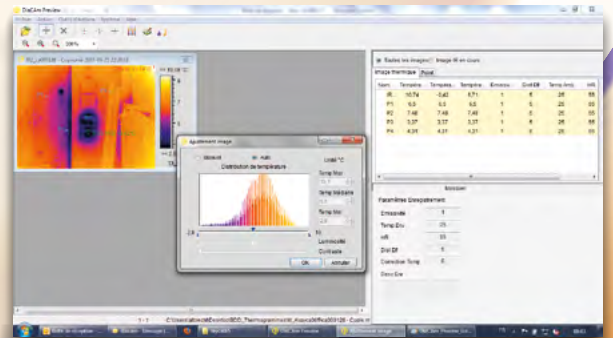
A wide range of integrated tools, manual cursors, automatic detection of hot or cold points, alarms.



PREVIEW AND ANALYSIS SOFTWARE

The **DiaCAM Preview** software is ideal for analysing infrared images. Its easy-to-use interface means quick access for everyone. In addition, all the analysis functions are already integrated in the toolbar.

- Cursors (automatic display of the temperature at the chosen point).
- Thermal profile (automatic display of Min/Max/Avg on the line).
- A square or circle for analysis by zone (ideal for comparing Min/Max/Avg between terminals, for example).
- Charts of results automatically and very quickly show all the information/analytical tools on the thermogram.
- "Max" function automatically indicates the hot point in the thermogram or in a predefined area for analysis.
- Polygons and polylines for more detailed analysis of certain areas in the thermogram.



Technical Specifications

	C.A 1877	C.A 1878	C.A 1882
Detector specifications			
Detector	80 x 60	100 x 80	160 x 120
Type	UFPA microbolometer, 8-14 µm		
Frequency	9 Hz		50 Hz*
Sensitivity (N.E.T.D)	0.08 °C @ 30 °C		
Temperature measurement			
Temperature range	-20 °C to +250 °C		
Accuracy	±2 °C or ±2 % of reading		
Image performance			
Thermal image			
Field of view	10° x 8°	12° x 10°	38° x 28°
Spatial resolution	2.2 mrad		4.4 mrad
Min. focal distance	10 cm		
Focusing	Manual		
Real image			
"MixVision" mode	No		Yes
	-		Merge function with adjustment from 0 to 100 % of the level of the thermal image overlay in the real image
Image size	-		640 x 480 pixels
Functions			
Emissivity correction	Yes		
Parameter settings	Emissivity, environmental temperature, distance, relative humidity		
Measurement tools	1 manual cursor + automatic Min/Max detection on adjustable area + adjustable alarm (C.A 1877 & C.A 1878)		
Laser pointer	Yes		
Memory	1,000 thermal images as standard		
Type of storage	Removable 2 GB SD card (as standard), up to 16 GB		
Screen	2.5 inches, multi-directional		
General specifications			
Battery	Lithium-Ion rechargeable battery / Battery life: 3 hours		
Battery recharging	Recharging via external charger		
Protection	IP54		

* 9 Hz outside the European Union

References to order

C.A 1877 IR thermal camera.....	P01651277
C.A 1878 IR thermal camera.....	P01651278
C.A 1882 IR thermal camera.....	P01651215
C.A 1882 9 Hz IR thermal camera.....	P01651215E

Accessories

Battery	P01296045
Battery charger	P01296046
Bag	P01298075
Docking station.....	P01651528
Mains power supply	P01651527
Sun-shade.....	P01651532
In-vehicle charger adapter	HX0061
C.A 1875 training bench	P01651620

Standard states at delivery:

C.A 1877 or **C.A 1878**: delivered in plain cardboard box with battery charger, battery, 2 GB SD card, SD card reader, DiaCam Preview software on CD-ROM, operating manuals and measurement reports.

C.A 1882: delivered in plain cardboard box with battery charger, docking station, battery, 2 GB mini-SD card, SD card reader, video cable, RayCam Preview software on CD-ROM, operating manuals and measurement reports.



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