

## 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

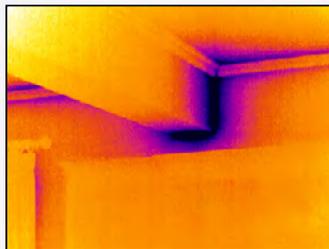
# Thermal Cameras

## 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.

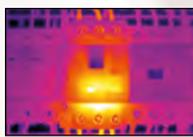


- Detection of insulation faults, air leaks, thermal bridges and excessive humidity.
- Detection of leaks, blockages and embedded ducts.



## 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.

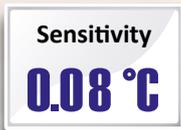
It is also equipped with the MixVision function which allows you to link a thermogram to a real image.

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 %.



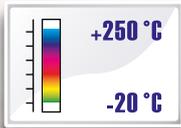
# DiaCAm

## 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).



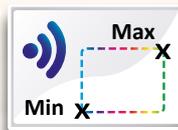
### Dynamic range for measurement

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



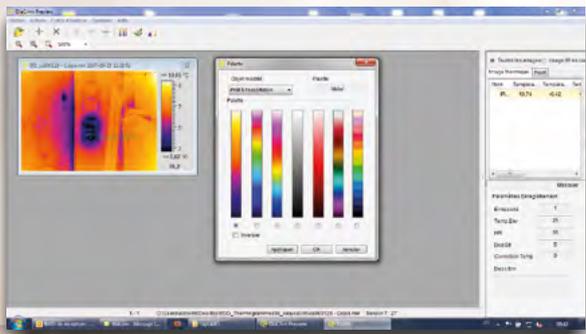
### Recording

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



### Integrated functions

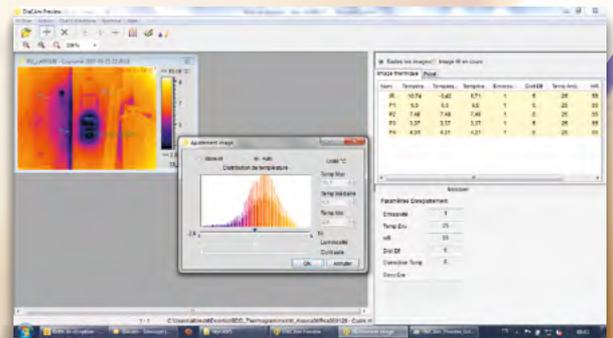
A wide range of integrated tools, manual cursors, automatic detection of hot or cold points, alarms.



## 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  |
|--------------------------------|---|--|-----------|
| <b>Detector specifications</b> |   |  |           |
| 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   |  |           |
| <b>Temperature measurement</b> |   |  |           |
| Temperature range              | -20 °C to +250 °C   |  |           |
| Accuracy                       | ±2 °C or ±2 % of reading  |  |           |
| <b>Image performance</b>       |   |  |           |
| <b>Thermal image</b>           |   |  |           |
| 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  |  |           |
| <b>Real image</b>              |   |  |           |
| "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   |           |
| <b>Functions</b>               |   |  |           |
| 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   |  |           |
| <b>General specifications</b>  |   |  |           |
| 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.



For assistance and ordering



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