



## The Infrared Camera that Makes Thermography Accessible to Everyone

### **INFRARED CAMERA**





- Economical, ergonomic and ideal for educational purposes
- Capture of real and infrared images, as well as a MixVision mode
- Video output for use with video projectors
- ▲ Wide-angle lens and analytical software supplied as standard features

# **ERGONOMICS**

The C.A 1882 camera is compact and lightweight, with IP54 protection, and is equipped with a 2.5" screen for easy reading in all circumstances.

Its pistol shape ensures excellent handling and its docking station offers perfect stability.

The docking station also has a PAL/NTSC video output for connection to a video projector.

## **APPLICATIONS**

Accessible and economical, the C.A 1882 camera is ideal for educational purposes, but is also a useful alternative for self-employed technicians, troubleshooters and maintenance teams.

### **EDUCATION**

Specially designed with training in mind, the C.A 1882 is a perfect tool for teaching people about infrared thermography.

- Demonstration and display of all the phenomena encountered in thermography
- Use with video projectors

### **BUILDING INSPECTIONS**

The C.A 1882 enables you to quickly locate any energy losses.

- Building insulation
- Water leak detection
- Underfloor heating
- Humidity



## **PREVENTIVE & PREDICTIVE MAINTENANCE TEAMS**

In industry and the tertiary sector, the C.A 1882 camera can be used for electrical or mechanical analyses.

- Electrical applications
  - $\rightarrow$  Load unbalance
  - → Connection problems
  - → Detection of damaged fuses (circuit-breakers)
  - $\rightarrow$  Verification of heat diffusion in a generator
- Mechanical applications
  - → Electric motors: detection of anomalies or internal component malfunctions to prevent motor overheating





# **FUNCTIONS & SOFTWARE**

The RayCAm Preview software is ideal for analysing infrared images. Its interface is so simple that anyone can learn how to use it very quickly. For analysis, all the functions are accessible via the toolbar.

## **INFRARED IMAGE / REAL IMAGE / MIXVISION**

With the RayCAm Preview software, you can link your thermogram to a real image. This makes it easier to identify faults and malfunctions so that you can deal with them appropriately!

Users can reinitialize the mix by modifying the percentage of IR/ real image as required for clearer reports: the adjustment range is 0 to 100 %!



- Retouch and correct parameters such as the emissivity, ambient temperature, relative humidity and effective distance
- Use a wide range of tools (cursors, etc.) to analyse the infrared image
- Export the data into MS Excel

**ANALYSIS MODE** 

This mode is useful for first-level analysis when you are simply seeking a rough idea of the temperature values without saving the analyses.

### SPECIAL THERMOGRAPHY TRAINING BENCH

The C.A 1875 training bench can be used alongside the C.A 1882 camera to explain and display the phenomena encountered in thermography, demonstrating all the possible sources of error when taking measurements with a thermographic camera.

The multiple experiments available can be used to define and thus avoid the problems which may be encountered: emissivity of materials, positioning, reflection, transmission (plexiglas screen), spatial resolution (variable target width), etc.

Supplied with notes for experiments and practical exercises, it mainly comprises a hot plate (set to 50 °C), several sheets of different materials, including plexiglas, and a target equipped with slots of various widths.





#### **Technical Specifications**

Detector Specifications		
Detector	160 x 120	
Туре	Focal plane array (FPA), uncooled microbolometer	
Frequency	50 Hz (9Hz outside EU area, model : P011651215E)	
Spectral range	8-14 μm	
Thermal sensitivity (N.E.T.D)	0.08 C at 30 °C	
Temperature Measurement		
Temperature range	- 20 °C to + 250 °C	
Measurement corrections	Ambient temperature / Correction of Emissivity / Distance / Humidity	
Image Specifications		
IR image		
Field of view / minimum focal distance	38°x 28°/ 0,1 m	
Spatial resolution	4,4 mrad	
Focusing	Manual	
Available modes	Thermal / Visible / MixVision	
Merge	Yes	
Real-image resolution of camera	640 x 480 pixels	
General Specifications		
Type / storage capacity	2 GB removable SD Card, up to 16 GB	
Screen	2.5" TFT screen	
Weight	Less than 500 g (with battery)	
Dimensions	172 mm x 80 mm x 162 mm	
Protection	IP54	

### State at delivery :

EduCAm C.A 1882 Camera delivered with 1 battery charger, 1 docking station, 1 battery, 1 mini-SD Card (2 GB), 1 SD Card reader, 1 video cable, RayCAm Preview software on CD-Rom, operating manuals.

Infrared image bank for use in training available from your Sales Contact.

**C.A 1875 Training Bench** (optional) delivered in a bag with a power cable, test materials, an operating manual with theoretical booklet, experiment notes and practical exercises.

#### To order:

C.A 1882 EduCam camera	
C.A 1882E EduCam camera 9Hz	
C.A 1875 Training Bench	P01651620
Mains power supply	
Battery for C.A 1882	
Battery charger for C.A 1882	
Docking station for C.A 1882	
Sunshade for C.A 1882	
In-vehicle charger adapter	НХОО61
Introduction to Thermography	Please contact us

**Chauvin Arnoux** 190, rue Championnet 75876 PARIS Cedex 18 Tél : +33 1 44 85 44 85 Fax : +33 1 46 27 73 89 info@chauvin-arnoux.fr www.chauvin-arnoux.fr

#### UNITED KINGDOM

Chauvin Arnoux Ltd Unit 1 Nelson Ct, Flagship Sq, Shaw Cross Business Pk Dewsbury, West Yorkshire - WF12 7TH Tel: +44 1924 460 494 Fax: +44 1924 455 328 info@chauvin-arnoux.co.uk www.chauvin-arnoux.com MIDDLE-EAST Chauvin Arnoux Middle East P.O. BOX 60-154 1241 2020 JAL EL DIB - LEBANON Tel: +961 1 890 425 Fax: +961 1 890 424 camie@chauvin-arnoux.com www.chauvin-arnoux.com



References