

# 2019



## ENVIRONMENTAL MEASUREMENTS

# About the CHAUVIN ARNOUX GROUP

Founded in 1893 in Paris, France, **CHAUVIN ARNOUX**, has succeeded over the centuries in constantly developing its expertise in the design, manufacture and commercialization of measuring instruments for professionals.

From portable instrumentation to fixed electrical equipment and energy performance solutions, from control of the whole thermal process chain to industrial metrology, the **CHAUVIN ARNOUX Group's** offering covers every customer requirement, whatever the sector (contractors, industry, administration, etc.).

*“CHAUVIN ARNOUX is a major player in the measurement market in France and internationally.”*



## Total control of product design and manufacturing

in-house enables the Group to innovate constantly and to propose a very broad product and service offering meeting all its customers' needs

## A Few Figures

- 10 subsidiaries worldwide
- 900 employees
- 7 production sites
- 6 R&D departments worldwide
- 11 % of revenues invested in R&D
- Turnover of 100 million euros



*Chauvin Arnoux, a team close to  
you and your partner for:*

*Energy performance*

*Regulatory testing*

*Environmental measurements*

*Supervision and  
sizing of installations*

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# Temperature & process signal calibrators



## CA 1621

Ref.: P01654621

Temperature calibrator for thermocouple probes capable of measuring and simulating up to 8 types of thermocouple as well as a voltage in mV.

### STATE AT DELIVERY

Delivered with a soft case, 2 thermocouple adapters, 6 x AAA 1.5 V batteries and a user's manual in 5 languages

Input/output range		Resolution		Accuracy
-10 mV ... 100 mV		0.01 mV		± 0.025 % + 2 counts
Function	Range	Resolution	Accuracy	Reference junction error
Type J	-200 ... +1200 °C	0.1 °C	± (0.3 °C + 10 µV)	± 0.3 °C
Type K	-200 ... +1370 °C	0.1 °C	± (0.3 °C + 10 µV)	± 0.3 °C
Type T	-200 ... +400 °C	0.1 °C	± (0.3 °C + 10 µV)	± 0.3 °C
Type E	-200 ... +950 °C	0.1 °C	± (0.3 °C + 10 µV)	± 0.3 °C
Type R	-20 ... +1750 °C	1 °C	± (1 °C + 10 µV)	± 0.3 °C
Type S	-20 ... +1750 °C	1 °C	± (1 °C + 10 µV)	± 0.3 °C
Type B	+600 ... +1800 °C	1 °C	± (1 °C + 10 µV)	± 0.3 °C
Type N	-250 ... +1300 °C	0.1 °C	± (0.3 °C + 10 µV)	± 0.3 °C



## CA 1623

Ref.: P01654623

Temperature calibrator for resistive probes capable of measuring and simulating up to 7 types of resistive probes as well as a resistance.

### STATE AT DELIVERY

Supplied with a soft case, a pair of test cables, a pair of crocodile clips, 6 x AAA 1.5 V batteries and a user's manual in 5 languages

Accuracy in °C					
Mode	Range	4-wire input	2 / 3-wire input	Output	Admissible excitation in mA
Pt10 385	-200 ... +800 °C				0.1 ... 3.0
Pt50 385	-200 ... +800 °C	0.7	1.0	0.7	0.1 ... 3.0
Pt100 385	-200 ... +800 °C	0.33	0.5	0.33	0.1 ... 3.0
Pt200 385	-200 ... +250 °C +250 ... +630 °C	0.2 0.8	0.3 1.6	0.2 0.8	0.1 ... 3.0
Pt500 385	-200 ... +500 °C +500 ... +630 °C	0.3 0.4	0.6 0.9	0.3 0.4	0.06 ... 3.0
Pt1000 385	-200 ... +100 °C +100 ... +630 °C	0.2 0.2	0.4 0.5	0.2 0.2	0.1 ... 3.0
Pt100 JIS	+200 ... +630 °C	0.2	0.3	0.3	0.1 ... 3.0



## CA 1631

Ref.: P01654402

Process signal calibrator used to measure or provide a current loop between 0 and 24 mA and a DC voltage between 0 and 20 V.

### STATE AT DELIVERY

Supplied with a soft case, a pair of test cables, a pair of crocodile clips, a pair of test probes, 6 x AAA 1.5 V batteries and a user's manual in 5 languages

Range	Resolution	Accuracy ± (% of reading + counts)
100 mV	0.01 mV	0.02 % + 3
20 V	0.001 V	0.02 % + 3
Input impedance: 2 MΩ (rated value), < 100 pF		
Protection against overvoltages: 30 V - Current delivered at 20 V: 1 mA		
Range	Resolution	Accuracy ± (% of reading + counts)
24 mA	0.001 mA	0.015 % + 3
Protection against overloads: 125 mA / 250 V quick-response fuse		
Display as percentage: 0 % = 4 mA, 100 % = 20 mA		
Source mode: 1,000 Ω load at 20 mA for a battery voltage ≥ 6.8 V, (700 Ω at 20 mA for a battery voltage between 5.8 and 6.8 V)		
Simulation mode: external loop voltage condition: 24 V (rated value), 30 V maximum, 12 V minimum.		
Loop voltage power supply: 24 V ± 10 %		

## ACCESSORIES / REPLACEMENT PARTS

Mains power supply	P01103057
MultiFix bag 120 x 245 x 60 mm	P01298075
Set of 2 red/black crocodile clamps	P01295457Z



Set of 2 red/black moulded PVC cables	P01295451Z
Set of 2 x Ø 4 mm moulded test probes	P01295451Z



# Thermal cameras

## CA 1950

Ref.: P01651901

## CA 1954

Ref.: P01651904



	CA 1950	CA 1954
Detector	80 x 80	120 x 160
Sensitivity (N.E.T.D)	80 mK @ 30 °C (0.08 °C à 30 °C)	
Refresh rate	9 Hz	
Temperature range	-20 °C to +250 °C	
Accuracy	±2 °C or ±2 % of reading	
Field of view	20° x 20°	28° x 38°
IFOV (spatial resolution)	4.4 mrad	4.1 mrad
Focus	Fixed	
Real image	Yes	
Measurement tools	Automatic Min and Max detection on adjustable area 1 manual cursor + automatic detection + Min Max on adjustable area + temperature profile + isotherm	
Parameter settings	Emissivity, environmental temperature, distance, relative humidity	
Voice comments	Yes, via Bluetooth (earpiece supplied)	
Connectivity	F407, F607, MTX 3292 and MTX 3293 clamps	F407, F607, MTX 3292 and MTX 3293 clamps, environmental measurement products (CA 1821, CA 1822, CA 1823, CA 1246, CA 1227, etc.)
Data storage	On removable 2 GB micro-SD card (approx. 4,000 images) up to a 32 GB	
Type	Rechargeable NiMH batteries with low self-discharge	
Battery life	13.5 hrs (typical)	9 hrs (typical)
Ingress protection	IP 54	
Fall resistance	2-metre drop	
Weight / dimensions	700 g with rechargeable batteries / 225 x 125 x 83	



### STATE AT DELIVERY

Cameras delivered in site-proof case with 4 NiMH batteries and 1 battery charger, 1 micro SD HD card, 1 USB cable, 1 Bluetooth earpiece, CAMReport software on CD-ROM, user's manuals and a measurement report



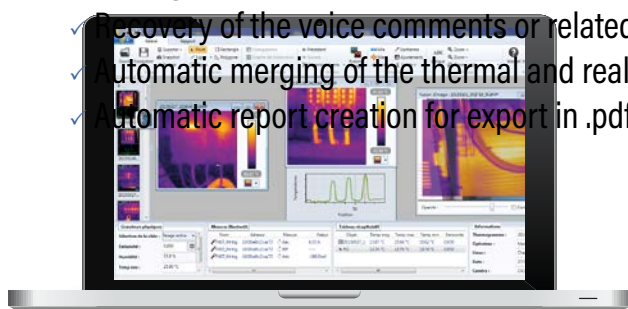
## CAMReport software

The CAMReport software is equipped with a very simple user interface for:

- ✓ Analysis of the thermograms using a large number of tools (cursors, thermal profiles, squares or circles or polygons for area analyses).

**Results tables quickly and automatically display all the information/analytical tools on the thermogram.**

- ✓ Recovery of the voice comments or related measurements
- ✓ Automatic merging of the thermal and real images recorded simultaneously
- ✓ Automatic report creation for export in .pdf or .docx format.



# Thermal cameras



**CA 1888**  
Ref.: P01651270

IP  
54

384  
x  
288



	CA 1888
Detector	384 x 288
Type	UFPA microbolometer, 8-14 microns
Sensitivity (NETD)	0.05 °C to 30 °C
Refresh rate	50 Hz (9 Hz outside EU)
Temperature	-20 °C to +600 °C as standard, up to 1,500 °C available as an option
Accuracy	±2 °C or ±2 %
Optics	Field of view: 24° x 18°, IFOV: 1.1 mrad Min. focal distance: 10 cm
"MixVision" mode	Merge function with adjustment of the IR image overlay in the real image from 0 to 100 %
Image size	640 x 480 pixels
Settings	Emissivity, environmental temperature, distance, humidity
Measurement tools	3 manual cursors + auto detection, Max/Min/Avg on area, isotherm, temperature differential, temperature profile
Data storage	1,000 radiometric images in 250 folders + 2 GB on mini-SD card
Power supply	Battery life: 3 hrs (continuous use) Recharging with external charger

## STATE AT DELIVERY

Delivered in a hard case with a battery charger, 2 batteries, 1 x 2 GB SD card, 1 SD card reader, 1 video cable, RayCAM Report Standard software and a measurement report



The CA 1888 thermal camera is available in other configurations:

1,000 °C high-temperature option P01651271

1,500 °C high-temperature option P01651272

Bluetooth P01651273

RayCAM Report software supplied for area analysis (polygons or polylines) and study of temperature distribution on a histogram

## ACCESSORIES / REPLACEMENT PARTS

Sun shade P01651531

Photo tripod adapter P01651526

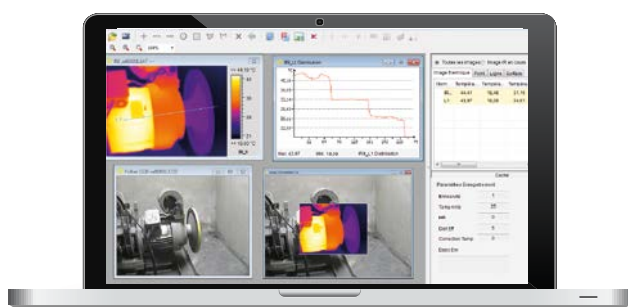
Lens cover P01651522

Battery P01296041

Battery charger P01296043

Mains power supply P01651527

## RayCAM Report Standard software



The RayCAM Report Standard software can be used for direct analysis of the thermograms and for generating customized reports which can be exported in Word or PDF format.

✓ Creation of customized reports.

# IR thermometers & contact thermometers



**CA 1860**

Ref.: P01651815

**CA 1862**

Ref.: P01651816

**CA 1864**

Ref.: P01651813

**CA 1866**

Ref.: P01651814

**NEW**

	CA 1871	CA 1860	CA 1862	CA 1864	CA 1866
Field of view	8/1	10/1	12/1	30/1	50/1
Emissivity	Fixed : 0.95		Adjustable from 0.1 to 1.0		0.1 to 1
Measurement range	-30 °C to +550 °C	-35 °C to +450 °C (-31 °F to +842 °F)	-35 °C to +650 °C (-31 °F to +1202 °F)	- 50 °C to +1000 °C	
Resolution	Output 1 mV/°C		0.1 °C (0.1 °F)		0.1 °C
Accuracy*	± 2 %		± 1.8 °C or ± 1.8 % of reading (take the higher value)		± 2 % ± 2 °C
Functions	-		Instantaneous mode, MAX, MIN, AVG, differential (DIF), continuous measurement by blocking measurement trigger, alarms		Min, Max, Avg, Hold, Alarms, Diff
Laser sight	Yes		Dual laser		Yes
Dimensions / weight	164 x 50 x 40 mm 182 g		189 mm x 118 mm x 55 mm / 292 g		230 x 100 x 56 mm / 290 g

\* Depending on temperature range. See user's manual for further details.

## STATE AT DELIVERY

Products delivered with batteries,  
user's manual and carrying bag



**CA 1871**

Ref.: P01651610Z



**CA 876**

Ref.: P01651403Z

**CA 876**

	IR measurement	Contact measurement
Field of view	10/1	-
Emissivity	0.1 to 1	-
Measurement range	-20 °C to +550 °C	-40 °C to +1350 °C
Resolution	± 2 % R or ± 3 °C	± 0.1 % R + 1 °C
Accuracy*	Max, Min, Avg, HOLD, Alarms	
Dimensions / weight	173 x 60.5 x 38 mm / 255 g	

## STATE AT DELIVERY

Product delivered with battery,  
user's manual and protective sheath



**TK2002**

Ref.: P01653110

**TK 2000**

**TK 2002**

	TK 2000	TK 2002
No. of inputs	1	2
Range	- 50 °C to +1000 °C	
Accuracy	± 1.5 % + 0.5 °C	
Functions	HOLD, °C	
Dimensions	163 x 63 x 37.5 mm	
Weight	200 g	

## STATE AT DELIVERY

Product delivered with battery,  
user's manual and protective sheath



**TK2000**

Ref.: P01653100

# IR & contact thermometers

## CA 1821

Ref.: P01654821

## CA 1822

Ref.: P01654822

## CA 1823

Ref.: P01654823



CA Environmental Loggers

	CA 1821	CA 1822	CA 1823
Sensor	J, K, T, N, E, R or S thermocouple		Pt100, Pt1000
No. of inputs	1	2	1
Range	-250 °C to 1767 °C		-100 °C to 400 °C
Resolution	$\theta < 1,000\text{ °C}$ : 0.1 °C and $\theta \geq 1,000\text{ °C}$ : 1 °C		0.1 °C
Accuracy	$\pm (0.1\% R + 0.6\text{ °C})$	$\pm (0.4\% R + 0.3\text{ °C})$	$\pm (0.4\% R + 0.3\text{ °C})$
Functions	Min., Max., HOLD, Alarms		
Recording	Manual start and stop on the product Programmed recording		
Alarms	Visual alert if a threshold is overrun configurable via Data Logger Transfer Possibility of triggering recording on alarm threshold		
Battery life	1,000 hrs (portable mode) / 3 years for recording (measurement interval: 15 minutes)		
Ingress protection	IP54 casing		
Mounting	Casing equipped with a magnet, a wall-mount system and a slot for suspending the product. Compatible with the Multifix accessory.		
Connections	CA 1821 and 1822: miniature female compensated CA 1823: 3-point flat connector		
Dimensions/weight	150 x 72 x 32 mm / 260 g with batteries		



### STATE AT DELIVERY

Products delivered with carrying bag, batteries, 1 USB cable, measurement report and quick start-up guide (Complete Data Logger Transfer user's manual and software available from the Chauvin Arnoux website)



### ACCESSORIES / REPLACEMENT PARTS

Handle for CK extension .....	P03652912	Carrying bag .....	P01298075
Connector for K thermocouple .....	P03652925	Metal case .....	P01298071
Shockproof sheath + Multifix .....	P01654252	Dataview software .....	P01102095
Multifix .....	P01102100Z	BLE / USB Bluetooth modem for PC .....	P01654253
Mains adapter .....	P01651023	4 x NiMH AA/LR6 batteries + Charger .....	HX0053

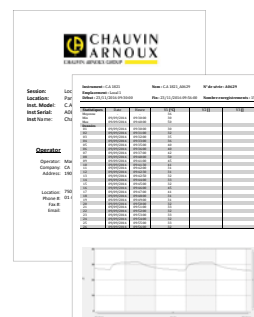
## Data Logger Transfer, the software for analysing your data



Bluetooth®



Configuration of the instruments connected  
Programming of recordings and alarms  
Capture and display of the data in real time



Automatic report creation



Exportable in  
Word format  
This makes it  
easier to print and  
archive them.



# Temperature sensors

## K thermocouple sensors

Models	Description	Measurement range	Tolerance class	63 % response time	Plunger diameter	Plunger length
SK1 / P03652901	Needle sensor for penetration with stainless-steel sheath	-50 °C to 800 °C	Class 2	1 second	3 mm	15 cm
SK2 / P03652902	Bendable general-purpose sensor with stainless-steel sheath	-50 °C to 1000 °C	Class 2	2 seconds	2 mm	1 m
SK3 / P03652903	Semi-rigid general-purpose sensor with stainless-steel sheath	-50 °C to 1000 °C	Class 2	6 seconds	4 mm	50 cm
SK4 / P03652904	Surface sensor Sheathed with stainless-steel sensing element and Teflon base	0 °C to 250 °C	Class 2	1 second	5 mm	15 cm
SK5 / P03652905	Surface sensor with spring	-50 °C to 500 °C	Class 2	1 second	5 mm, diameter in contact 8.5 mm	15 cm
SK6 / P03652906	Flexible sensor not suitable for liquids	-50 °C to 285 °C	Class 2	1 second in contact 3 s ambient	1 mm	1 m
SK7 / P03652907	Air sensor for ambient measurement	-50 °C to 250 °C	Class 2	5 seconds	5 mm	15 cm
SK8 / P03652908	Pipe sensor	-50 °C to 140 °C	Class 2	10 s on Ø 12 mm stainless-steel pipe	90 mm	32 cm
SK11 / P03652917	Needle sensor for penetration with handle Stainless -steel sheath	50 °C to 600 °C	Class 2	12 seconds	3 mm	13 cm
SK13 / P03652918	General-purpose sensor with stainless-steel sheath	-50 °C to 1100 °C	Class 2	12 seconds	3 mm	30 cm
SK14 / P03652919	Elbowed surface sensor	-50 °C to 450 °C	Class 2	8 seconds	6 mm	13 cm
SK15 / P03652920	Surface sensor with spring and handle	-50 °C to 900 °C	Class 2	2 seconds	8 mm	13 cm
SK17 / P03652921	Air sensor for ambient measurement with handle and spiral cable	-50 °C to 600 °C	Class 2	5 seconds	6 mm	13 cm
SK19 / P03652922	Magnetic sensor with magnet for flat metal surfaces	-50 °C to 200 °C	Class 2	7 seconds	4 mm	1 m
SK20 / P01655010	General-purpose flexible sensor	-40 °C to 450 °C	Class 1	1 second	1.5 mm	1 m

Accuracy Class I / -40 °C to +375 °C:  $\pm 1.5$  °C / +375 °C to +1000 °C:  $\pm 0.004 \times T$  °C.  
Accuracy Class II / -40 °C to +333 °C:  $\pm 2.5$  °C / +333 °C to +1200 °C:  $\pm 0.0075 \times T$  °C.

## Extensions for thermocouples

	Description	Ø	Length
CK1	Terminated by male plug / female plug	4 mm	1 m
CK2	Terminated by male plug / 2 bare wires	4 mm	1 m
CK3	Terminated by 5-pin DIN plug / female socket	4 mm	1 m
CK4	Terminated by 2 banana plugs / female socket	4 mm	1 m

Temperature withstand of extensions: -40 °C to +100 °C

## Pt 100 $\Omega$ temperature sensors

Description	Measurement range	Tolerance class	63 % response time	Plunger diameter	Plunger length
General-purpose sensor with stainless-steel sheath	-100 °C to 450 °C	Class A	7 seconds	3 mm	20 cm
Surface sensor with spring ressort	-50 °C to 200 °C	Class B	6 seconds	5 mm	13 cm
Stainless-steel needle sensor for penetration	-100 °C to 600 °C	Class B	7 seconds	3 mm	13 cm
Air sensor	-100 °C to 600 °C	Class B	5 seconds	5 mm	13 cm
Stainless-steel sensor for immersion	-100 °C to 600 °C	Class B	7 seconds	3 mm	13 cm

Accuracy Class A /  $0.15$  °C +  $0.002 \times T$  °C - Accuracy Class B /  $0.3$  °C +  $0.005 \times T$  °C  
Miniature flat-pin connector, 3 poles · Spiral cable: 45 cm to 1 m

# Thermo-hygrometers

## CA 1246

Ref.: P01654246



CA Environmental Loggers

CA 1246	
Relative Humidity range	3.0 to 98.0 % RH
Relative Humidity accuracy	10 to 90 %RH: $\pm (2 \% RH \pm 1 \text{ ct})$ outside that range: $\pm (4 \% RH \pm 1 \text{ ct})$
Temperature range	- 10.0 to +60.0 °C
Temperature accuracy	10 to 40 °C: $\pm (0.5 °C \pm 1 \text{ ct})$ outside that range: $\pm (0.032 \times (T-25) \pm 1 \text{ ct})$ / T= temperature in °C
Dew point range and accuracy	Dew point: - 20.0 to +60.0 °Ctd Accuracy: 1.5 °C
Functions	Min., Max, HOLD, Alarms
Recording	Manual start and stop on the product Programmed recording
Alarms	Visual alert on threshold overrun configurable via Data Logger Transfer - Possibility of triggering recording on alarm threshold
Battery life	1,000 hrs (portable mode) / 3 years for recording (measurement interval: 15 minutes)
Ingress protection	IP54
Mounting	Casing equipped with a magnet, a wall-mount system and a slot for suspending the product. Compatible with the Multifix accessory.
Dimensions / weight	187 x 72 x 32 mm / 260 g



### STATE AT DELIVERY

Product delivered with carrying bag, batteries, 1 USB cable, measurement report and a quick start-up guide (complete user's manual and Data Logger Transfer software available from the Chauvin Arnoux website).



Data Logger Transfer  
Automatic report generation



### ACCESSORIES / REPLACEMENT PARTS

75 % RH salt cartridge	P01156401
33 % RH salt cartridge	P01156402
Shockproof sheath + Multifix	P01654252
Multifix	P011021002
Mains adapter	P01651023
Bag	P01298075
Metal case	P01298071
Dataview software	P01102095
Bluetooth BLE / USB modem for PC	P01654253
4 x AA/LR6 NIMH batteries + charger	HX0053

## CA 847

Ref.: P01156302Z



### STATE AT DELIVERY

Product delivered with battery, user's manual and protective sheath

CA 847	
RH range	6 to 100 % RH
RH accuracy	$\pm 1 \text{ LED}$
Dimensions	173 x 60.5 x 38 mm
Weight	160 g

# Luxmeters

## CA 1110

Ref.: P01654110



CA Environmental Loggers

CA 1110	
Measurement range	0.1 to 200,000 lx - 0.01 to 18,580 fc
<b>Accuracy in standard mode</b>	
Incandescent lamp	± 3 % of reading
LED	± 6 % of reading (3,000 K and 6,000 K)
Fluorescent lamps	± 9 % of reading
<b>Accuracy in compensation mode</b>	
LED mode	± 4 % of reading (at 4,000 K)
Fluo mode	± 4 % of reading (type F11, 4,000 K)
Functions	Min, Max, HOLD, Average
Recording	Manual start and stop on the product Programmed recording
MAP mode	The MAP function can be used to map the lighting on a surface or in a room. In this way, the measurements are saved in the same file.
Data storage	More than 1 million points
Power supply	- Alkaline batteries: 3 x 1.5 V LR6 or rechargeable NiMH battery - Mains connection via the mains / micro USB connector (option)
Battery life	500 hrs (portable mode) / 3 years for recording (measurement interval: 15 minutes)
Dimensions	Casing: 150 x 72 x 32 mm - Sensor: 67 x 64 x 35 mm (with protective cover) Spiral cable: 24 to 120 cm
Weight	345 g with batteries
Ingress protection	IP50 casing
Operating temperature / humidity	-10 to +60 °C - 10 to 90 % RH
Standards	Class C as per the French NF C 42-710 standard based on the CIE guidelines



### STATE AT DELIVERY

Product delivered with carrying bag, batteries, 1 USB cable, 1 measurement report and quick start-up guide (complete user's manual and Data Logger Transfer software available from the Chauvin Arnoux website).



### ACCESSORIES / REPLACEMENT PARTS

Shockproof sheath + Multifix .....	P01654252
Multifix .....	P01102100Z
Mains adapter .....	P01651023
Bag .....	P01298075
Metal case .....	P01298071
Dataview software .....	P01102095
Bluetooth BLE / USB modem for PC .....	P01654253
4 x AA/LR6 NiMH batteries + charger .....	HX0053

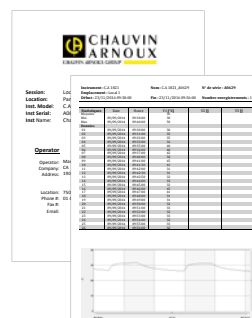
## Data Logger Transfer, the software for analysing your data



Bluetooth®



Configuration of the instruments connected  
Programming of recordings and alarms  
Capture and display of the data in real time



Automatic report creation

Exportable in Word format

This makes it easier to print and archive them.

# Gas measurement

## CA 1510

Ref.: P01651011

Ref.: P01651010 - Black



CA 1510

## CA 895

Carbon monoxide

Ref.: P01651001Z



CA 1510			
	CO2	Temperature	Humidity
Measurement range	0 to 5,000 ppm	-10 °C to +60 °C	5 to 95 % RH
Accuracy	± 50 ppm ± 3 % R	± 0.5 °C	± 2 % RH
Resolution	1 ppm	0.1 °C	0.1 % RH
Recording interval	Customizable from 1 minute to 2 hours		
Data storage	More than 1 million points		
Buzzer and units	Yes / °C or °F		
Backlighting / Hold / Min Max	Yes		
Dimensions / weight	125 x 65.5 x 32 mm / 190 g with batteries		
Power supply	Batteries: 2 x 1.5 V LR6 or rechargeable battery Possibility of mains connection with mains / micro USB adapter supplied as standard		
Interfaces	2 possible communication modes: Bluetooth wireless link and USB link; the product is then recognized as a USB key for easy file transfer		
Mounting	CA 1510 casing equipped with a magnet, a wall-mount system and a slot for suspending the product. A wall-mount with anti-theft protection (padlock not supplied) is available as an accessory. A desktop stand is also available (supplied as standard with the CA 1510W)		



### STATE AT DELIVERY

Product delivered in a cardboard box with batteries, USB mains adapter, 1 USB-micro USB cable, desktop stand, start-up guide, CD-ROM containing user's manual and data processing software.

\*Available in a black version delivered in a metal case

### ACCESSORIES / REPLACEMENT PARTS

(1) In-situ calibration kit	P01651022
Hard case	P01298071
Desktop stand	P01651021
(2) White wall-mount	P01651020
USB mains adapter	P01651023
USB-Bluetooth adapter	P01102112
Black wall-mount	P01651024



CA 895	
Measurement range	0 to 1,000 ppm
Accuracy	± 5 % + 5 ppm
Measurement mode	Normal or Avg.
Functions	Alarm, Max, HOLD
Dimensions	237 x 60.5 x 38 mm
Weight	190 g

### STATE AT DELIVERY

Product delivered with 9 V LR14 battery and shockproof protective sheath

### ACCESSORIES / REPLACEMENT PARTS

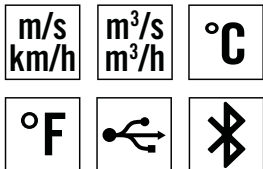
Aspiration kit with pump and extension ..... P01651101



# Thermo-anemometers

## CA 1227

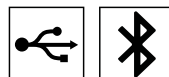
Ref.: P01654227



CA Environmental Loggers



	CA 1227
Air speed/flow-rate sensor	Vane with optical detection
Air speed range	0.50 m/s to 27.0 m/s (98.0 to 5,314 fpm)
Air speed accuracy	± 3 % R ± 0.1 m/s
Air flow-rate range	0 to 2,999 m³/h
Air flow-rate accuracy	± 8 % R
Temperature range °C/°F	- 20 to +50 °C / - 4 to +122 °F
Temperature accuracy °C	0 to 50 °C: ± 0.8 °C -20 to 0 °C: ± 1.6 °C
Functions	Min, Max, HOLD, Average
Recording	Manual start and stop on the product - Programmed recording
Data storage	More than 1 million points
Power supply	- Alkaline batteries: 3 x 1.5 V LR6 or rechargeable NiMH battery - Mains connection via the mains / micro USB adapter (option)
Battery life	200 hrs (portable mode) / 8 days for recording (measurement interval: 15 minutes)
Dimensions	Casing: 150 x 72 x 32 mm - Sensor: 160 x 80 x 38 mm Spiral cable: 24 to 120 cm
Weight	approx. 400 g
Ingress protection	IP40 casing
Operating temperature / humidity	-10 to +60 °C - 10 to 90 % RH



### STATE AT DELIVERY

Product delivered with carrying bag, 3 x 1.5 V AA alkaline batteries, USB cable, 1 measurement report and quick start-up guide (complete user's manual and Data Logger Transfer software available from the Chauvin Arnoux website)



### ACCESSORIES / REPLACEMENT PARTS

(1) Cones kit for flow-rate measurement with meter (circular cross-section Ø 210 mm and rectangular cross-section 346 x 346 mm)	P01654250	Mains adapter	P01651023
Vane sensor Ø 80 mm	P01654251	Carrying bag	P01298075
Shockproof sheath + Multifix	P01654252	Metal case	P01298071
Multifix	P01102100Z	Dataview software	P01102095
		Bluetooth BLE / USB modem for PC	P01654253
		4 x AA/LR6 NiMH batteries + charger	HX0053

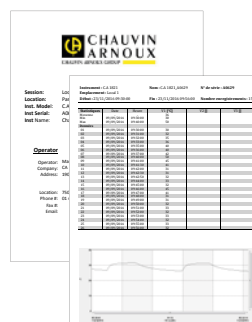
## Data Logger Transfer, the software for analysing your data



Bluetooth®



Configuration of the instruments connected  
Programming of recording and alarms  
Data capture and display in real time



Automatic report generation



Exportable in Word format  
This simplifies printing and archiving

# Sound-level meters and manometers

## CA 832

Ref.: P01185501Z



## CA 834

Ref.: P01185502



	CA 832	CA 834
Measurement range	37 to 130 dB	30 to 130 dB
Accuracy	±2 dB	±1.5 dB
Functions	A and C frequency weighting curves Fast and slow time weighting	A and C frequency weighting curves Fast and slow time weighting
Analogue output	10 mV/dB or 1 Vrms	10 mV/dB or 1 Vrms
Data storage	-	32,000 values
Software	-	Yes
Dimensions	237 x 60.5 x 38 mm	275 x 64 x 30 mm
Weight	230 g	285 g

### STATE AT DELIVERY

CA 832 - Delivered with a shockproof sheath, jack socket for analogue output, universal adapter for tripod mounting, manuals and batteries

CA 834 - Delivered in a hard case with software, Jack/USB cable, jack socket for analogue output, manuals and batteries



### ACCESSORIES / REPLACEMENT PARTS

Sound-level meter calibrator at 94 dB or 114 dB, CA 833	P01185301
Microphone extension for CA 834 (5 metres)	P01102085
Wind guard	P01102083
Jack/USB cable for CA 834	P01295478

## Manometers

## CA 852

Ref.: P01184101



## CA 850

Ref.: P01184102



	CA 850	CA 852
Measurement range	-6.89 to +6.89 bar	-138 to +138 mbar
Accuracy	0.3 % full scale	0.3 % full scale
Units	psi, bar, mbar, mmH <sub>2</sub> O, inH <sub>2</sub> O, kbar, cmH <sub>2</sub> O, FtH <sub>2</sub> O, mmHg, OZin <sup>2</sup> , kg/cm <sup>2</sup>	psi, bar, mbar, mmH <sub>2</sub> O, inH <sub>2</sub> O
Functions	Differential meas, Min, Max, HOLD	
Dimensions	182 x 72 x 30 mm	
Weight	220 g	

### STATE AT DELIVERY

CA 850 - delivered in a hard case with 2 connection tubes, 1 user's manual in 5 languages and battery

CA 852 - delivered in a hard case with 2 connection tubes, 1 user's manual in 5 languages and battery



# Tachometers

## CA 1727

Ref.: P01174830



## CA 1725

Ref.: P01174810

### RPM function

Range	60 to 100,000 RPM
Accuracy	$10^{-4}$ Reading $\pm 6$ cts

### m/min function

Range	60 to 10,000 m/min.
Accuracy	$10^{-4}$ Reading $\pm 1$ increment

### Hz function

Range	1 to 10,000 Hz
Accuracy	$4 \times 10^{-5}$ Reading $\pm 4$ cts

### ms function

Range	0.1 to 1,000 ms
Accuracy	$10^{-4}$ Reading $\pm 5$ cts

### Ratio function

Range	0.1 to 100 %
Accuracy	0.1 % to 1 %

### Counting function

Range	-	0 to 100,000 events
Accuracy	-	$\pm 1$ event
Functions	Min, Max, HOLD, Smoothing	
Data storage	-	High and low alarm
Dimensions	21 x 72 x 47 mm	
Weight	250 g	

### STATE AT DELIVERY

Delivered in hard case with 1 FRB F connector, 1 x 9 V LR14 battery, 1 set of 15 reflective strips (length: 0.1 m), 1 CD-ROM containing the user's manual



### ACCESSORIES / REPLACEMENT PARTS

(1) Mechanical accessories kit	P01174902
End-fittings (set of 3)	P01174903
Reflective tape (15 x 0.1 m strips)	P01101797
FRB F socket	P01101785
USB mains adapter	P01651023
TACHOGRAPH software on CD-ROM	P01174835
USB-A-to-USB-B cable	P01295293

# Fieldmeters

## CA 40

Ref.: P01167501



## CA 41

Ref.: P01167001B



## CA 43

Ref.: P01167002A



	CA 40	CA 41	CA 43
Measurement	Magnetic field	Electric field	
Dynamic range	Up to 2 mT	0.1 V/m to 200 V/m	
Frequency range	30 to 300 Hz	100 kHz to 2.5 GHz	
Accuracy	$\pm(5 \% + 3 \text{ cts})$ on the 200 $\mu\text{T}$ range	0.7 V/m to 2 dB depending on range	
Sensor	One-way	Isotropic	
Data storage	No	No	Yes
Dimensions / weight	163 x 68 x 24 mm / 285 g	216 x 72 x 37 mm / 350 g	

### STATE AT DELIVERY

CA 40.... P01167501 delivered with battery and sensor

CA 41.. P01167001B delivered in hard case with sensor, batteries and user's manuals

CA 43 P01167002A delivered in hard case with batteries, sensor, optical fibre, 1 PC adapter, 1 CD-ROM containing data processing software for the CA 43



## 10 SUBSIDIARIES WORLDWIDE

### GERMANY

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