

CA 1821 / CA 1822 / CA 1823

Logger contact thermometers



Application Android
CA Environmental
Loggers

Versatility and high performance for temperature measurements

- J, K, T, N, E, R and S thermocouples (CA 1821 & CA 1822)
- Pt100 and Pt1000 resistance probes (CA 1823)
- Compact and magnetized for fixed or portable use
- Recording of up to 1 million points
- Alarms and recording triggered on alarms
- Battery life of up to 3 years

Designed and manufactured in France 

IP 54



Measure up



Probe Thermometers



Ingress protection: IP54 casing

Standard "compensated miniature female" connectors (CA 1821 and CA 1822)

Wide backlit display

Very simple portable use
1 key = 1 function!

USB and Bluetooth communication
for data transfers and configuration of recording

USB
UNIVERSAL SERIAL BUS

Bluetooth®

Standard "compensated miniature female" connectors (CA 1821 and CA 1822)

Multifix-compatible magnetized product

Shockproof sheath available as an accessory

Long battery life:
up to 1,000 hrs (portable mode)
3 years for recording (15-minute measurement interval)

ALARM: alarm thresholds can be set using the software
Visual alert on the product in the event of overruns
Recording can be triggered on alarm thresholds

CA 1821



CA 1822



CA 1823



Thermocouple thermometer

J, K, T, N, E, R, S
1 channel

Thermocouple thermometer

J, K, T, N, E, R, S
2 channels

Resistance thermometer

Pt100, Pt1000
1 channel

Measurement range	J - 210 to + 1,200 °C -346 to + 2,192 °F K - 200 to + 1,372 °C -328 to + 2,501 °F T - 250 to + 400 °C -418 to + 752 °F N - 200 to + 1,300 °C -328 to + 2,372 °F E - 150 to + 950 °C -238 to + 1,742 °F R 0 to + 1,767 °C 32 to + 3,212 °F S 0 to + 1,767 °C 32 to + 3,212 °F	- 100 to + 400°C -148 to + 752°F
Resolution	Display in °C: $\Theta < 1,000\text{ °C}$: 0.1 °C and $\Theta \geq 1,000\text{ °C}$: 1 °C Display in °F: $\Theta < 1,000\text{ °F}$: 0.1 °F and $\Theta \geq 1,000\text{ °F}$: 1 °F	Display in °C : 0.1°C Display in °F : 0.1°F
Intrinsic uncertainty in °C	(J. K. T. N. E) $\Theta \leq - 100\text{ °C}$: $\pm (0.2\% \text{ Reading} + 0.6\text{ °C})$ $- 100\text{ °C} < \Theta \leq + 100\text{ °C}$: $\pm (0.15\% R + 0.6\text{ °C})$ $+ 100\text{ °C} < \Theta$: $\pm (0.1\% R + 0.6\text{ °C})$ (R. S) $\Theta \leq + 100\text{ °C}$: $\pm (0.15\% R + 1.0\text{ °C})$ $+ 100\text{ °C} < \Theta$: $\pm (0.1\% R + 1.0\text{ °C})$	$\pm (0.4\% R + 0.3\text{ °C})$

FUNCTIONS

Recording	Manual start/stop on the product Short press on MEM: spot recording / Long press on REC: recording at the rate of the current mode Programmed recording Start date, recording rate (From 1 second to 1 hour) and end date can be customized with the PC software
Alarms	Alarm thresholds set using the software. Visual alert on the product in the event of an overrun Recording can be triggered on alarm thresholds
Data storage	More than 1 million points
Min-Max-Hold	Yes
Differential measurement	CA 1822 only
Units	°C or °F
Backlighting	Yes
Automatic power off	Yes (configurable)

POWER SUPPLY

Type	3 x 1.5V AA / LR6 alkaline batteries Mains connection possible with the mains / micro USB adapter proposed as an accessory
Battery life	CA 1821 & CA 1822: 1,000 hrs (portable mode) CA 1823 : 800 hrs (portable mode) 3 years for recording (15-minute measurement interval)

PHYSICAL SPECIFICATIONS

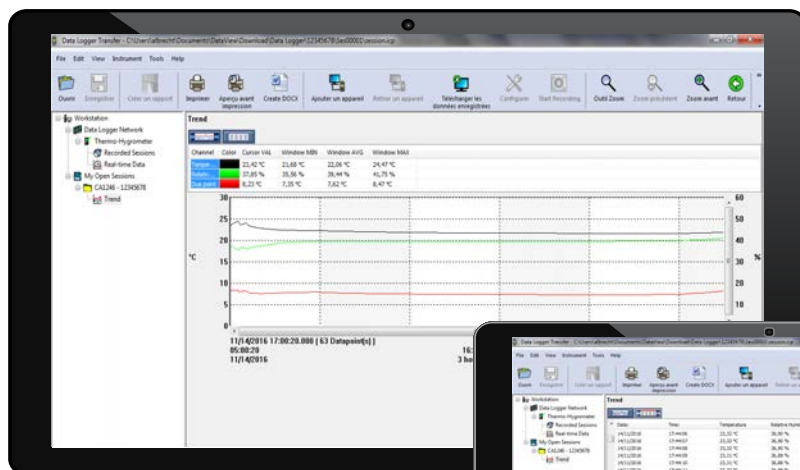
Interfaces	2 possible communication modes: Bluetooth and USB
Fixations	Casing equipped with a magnet, a wall-mount system and a slot for suspension of the product. Compatible with the Multifix accessory. Sheath available as an accessory
Connections	CA 1821 and 1822: compensated miniature female connectors CA 1823: 3-point flat connector
Dimensions / weight	150 x 72 x 32 mm / 260 g with batteries
Ingress protection	IP54 casing
Product operating range	Temperature from -10 to +60 ° C / Humidity from 10 to 90 %RH
Standards	IEC61010-1 / IEC 61326-1

GENERAL SPECIFICATIONS

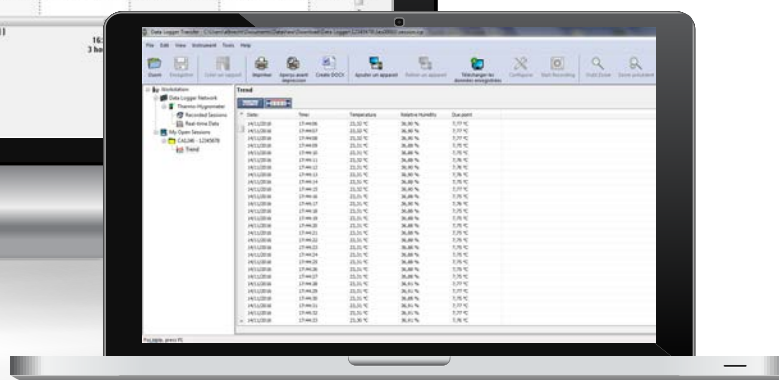
Windows Data Logger Transfer software functions	Real-time mode Automatic report generation in Word format Data format compatible with the Dataview software Graph or value-table presentation Data export in graph or Excel table format
Warranty	2 years

Data processing software

Data Logger Transfer, the software for analysing your data



Download and **display** of the data stored in memory
Display in table or graph form



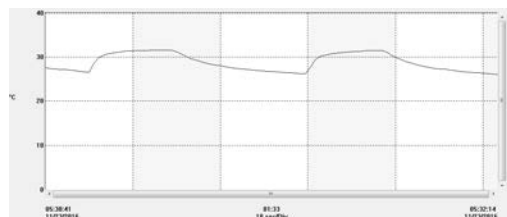
Configuration of the instruments connected
Programming of recordings and alarms
Data capture and display in real time



Session: Loc
Location: Par
Inst. Model: C.A
Inst Serial: A06
Inst Name: Cha

Instrument : C.A 1821 Nom : C.A 1821_A0629 N° de série : A0629
Emplacement : Local 1
Début : 23/11/2016 09:30:00 Fin : 23/11/2016 09:56:00 Nombre enregistrements : 15

Statistiques	Date	Heure	V1 [°C]	V2 []	V3 []
Moyenne	-	-	36		
Min	09/09/2014	09:30:00	30		
Max	09/09/2014	09:40:00	50		
Données					
01	09/09/2014	09:30:00	30		
02	09/09/2014	09:31:00	32		
03	09/09/2014	09:32:00	35		
04	09/09/2014	09:33:00	36		
05	09/09/2014	09:35:00	40		
06	09/09/2014	09:36:00	40		
07	09/09/2014	09:37:00	42		
08	09/09/2014	09:40:00	50		
09	09/09/2014	09:41:00	45		
10	09/09/2014	09:41:30	41		
11	09/09/2014	09:42:00	31		
12	09/09/2014	09:42:30	31		
13	09/09/2014	09:42:50	32		
14	09/09/2014	09:44:00	33		
15	09/09/2014	09:45:00	32		
16	09/09/2014	09:46:00	45		
17	09/09/2014	09:47:00	41		
18	09/09/2014	09:48:00	31		
19	09/09/2014	09:49:00	31		
20	09/09/2014	09:50:00	32		
21	09/09/2014	09:51:00	33		
22	09/09/2014	09:52:00	32		
23	09/09/2014	09:53:00	33		
24	09/09/2014	09:54:00	32		
25	09/09/2014	09:55:00	33		
26	09/09/2014	09:56:00	32		



Automatic report generation

**Exportable in
Word format**

This simplifies
printing and
archiving



ADDITIONAL INFORMATION

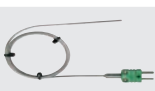
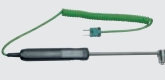
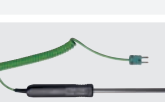
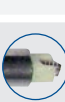
Export into an Excel spreadsheet or a jpeg file
Export of measurement data into DataView (*.dvb files)
Multilingual software



To obtain this application
software
Visit our website at
www.chauvin-arnoux.com

Temperature Probes

K THERMOCOUPLE

Model	Model	Description	Type / Application	Meas. range	Tolerance class	Response time at 63%	Plunger diameter	Plunger length	Ref.
	 SKF1	K-type thermocouple probe with exposed hot junction. Do not use in liquids (non-waterproof tip).	Wired probe	-50°C to 350°C	Cl.2	1 s	1,2 mm	1 m	P03652930
	 SK20	Sheathed sensor as per NF EN 61615. Hot junction insulated from the earth. Inconel 600 protective sheath.	Flexible general-purpose sensor	-40 °C to 450 °C	Cl. 1	1 s	1,5 mm	1 m	P01655010
	 SK6	All-purpose sensor recommended for measuring points that are difficult to access. Do not use in liquids (non-waterproof tip)	Flexible sensor	-50 °C to 285 °C	Cl. 2	1 s by contact	1 mm	1 m	P03652906
	 SK2	Stainless steel sheathed sensor, can be bent as required Radius of curvature > 4 mm	Bendable general-purpose sensor	-50 °C to 1000 °C	Cl. 2	3 s in ambient environment	2 mm	1 m	P03652902
	 SK3	Stainless steel sheathed sensor, slightly bendable	Semi-rigid general-purpose sensor	-50 °C to 1000 °C	Cl. 2	2 s	4 mm	50 cm	P03652903
	 SK13	Stainless steel sheathed sensor	General-purpose sensor	-50 °C to 1100 °C	Cl. 2	6 s	3 mm	30 cm	P03652918
	 SK7	In a 'calm' environment without air movement, shake the sensor to promote heat exchange	Air sensor for measuring ambient conditions	-50 °C to 250 °C	Cl. 2	12 s	5 mm	15 cm	P03652907
	 SK17	In a 'calm' environment without air movement, shake the sensor to promote heat exchange	Air sensor for measuring ambient conditions	-50 °C to 600 °C	Cl. 2	5 s	6 mm	13 cm	P03652921
	 SK1	Stainless steel sheathed sensor for penetration (min. 20 mm) in pasty, viscous or liquid media	Needle sensor for penetration	-50 °C to 800 °C	Cl. 2	1 s	3 mm	15 cm	P03652901
	 SK11	Stainless steel sheathed sensor for penetration (min. 20 mm) in pasty, viscous or liquid media	Needle sensor for penetration	50 °C to 600 °C	Cl. 2	12 s	3 mm	13 cm	P03652917
	 SK4	Sheathed sensor with stainless steel sensing element and Teflon base. For small flat surfaces. The use of silicone grease improves the quality of the contact	Surface sensor	0°C to 250°C	Cl. 2	1 s	5 mm	15 cm	P03652904
	 SK14	For surface temperatures that are difficult to access	Elbowed surface sensor	-50°C to 450°C	Cl. 2	8 s	6 mm	13 cm	P03652919
	 SK5	For flat surfaces. The spring ensures optimal contact even if the sensor is not placed perpendicularly. The use of silicone grease improves the quality of the contact	Surface sensor with spring	-50°C to 500°C	Cl. 2	1 s	5 mm Contact diameter 8.5 mm	15 cm	P03652905
	 SK15	For flat surfaces. The spring ensures optimum contact even if the sensor is not placed perpendicularly. Use of silicone grease improves the quality of the contact	Surface sensor with spring	-50°C to 900°C	Cl. 2	2 s	8 mm	13 cm	P03652920
	 SK8	For measurements on pipes. The copper foil is applied to the dry, clean pipe, with the double-sided Velcro tape ensuring contact by winding	Pipe sensor	-50°C to 140°C	Cl. 2	10 seconds on stainless steel pipe 12 mm in diameter	Ø 10-90 mm	32 cm	P03652908
	 SK19	Sensor with magnet for flat metal surfaces	Magnetic sensor	-50°C to 200°C	Cl. 2	7 s	4 mm	1 m	P03652922

EXTENSIONS FOR THERMOCOUPLES



Models	CK3	CK 2	CK1	CK 4
	Description		Ø	Length
CK1	Terminated by male plug / female plug		4 mm	1 m
CK 2	Terminated by male plug / 2 bare wires		4 mm	1 m
CK 3	Terminated by 5-pin DIN plug / female socket		4 mm	1 m
CK 4	Terminated by 2 banana plugs / female socket		4 mm	1 m

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



PT100 Ω TEMPERATURE PROBES

Model	Model	Type / Application	Description	Meas. range	Tolerance class	Response time at 63%	Plunger diameter	Plunger length	Ref.
	SP 10	Surface sensor with spring	For flat surfaces. The spring ensures optimum contact even if the sensor is not placed perpendicularly. Use of silicone grease improves the quality of the contact	-50 °C to 200 °C	Cl. B	6 s	5 mm	13 cm	P03652712
	SP 11	Needle sensor for penetration	Sensor for penetration (minimum 20 mm) in pasty, viscous or liquid media	-100 °C to 600 °C	Cl. B	7 s	3 mm	13 cm	P03652713
	SP 12	Air sensor	In a 'calm' environment without air movement, shake the sensor to promote heat exchange	-100 °C to 600 °C	Cl. B	5 s	5 mm	13 cm	P03652714
	SP 13	Sensor for submersion	Stainless steel sheathed sensor specially designed for liquids	-100 °C to 600 °C	Cl. B	7 s	3 mm	13 cm	P03652715
	SP 14	General-purpose sensor	316 L stainless steel sensor for general use	-100 °C to 450 °C	Cl. A	7 s	3 mm	20 cm	P01655020



Standard state at delivery:



Bag, 3 x 1.5 V AA alkaline batteries, USB cable, test report and quick start-up guide (Complete user manual and Data Logger Transfer software available from the Chauvin Arnoux website)

TO ORDER

- CA 1821 Single-channel thermocouple thermometer** P01654821
- CA 1822 Two-channel thermocouple thermometer** P01654822
- CA 1823 Single-channel resistance thermometer** P01654823

Accessories / Replacement parts

TYPE K THERMOCOUPLE PROBES

SKF1	P03652930		
SK 1	P03652901	SK 6	P03652906
SK 2	P03652902	SK 7	P03652907
SK 3	P03652903	SK 8	P03652908
SK 4	P03652904	SK 11	P03652917
SK 5	P03652905	SK 13	P03652918
		SK 14	P03652919
		SK 15	P03652920
		SK 17	P03652921
		SK 19	P03652922
		SK 20	P01655010

EXTENSIONS FOR THERMOCOUPLES

CK 1	P03652909	CK 3	P03652913
CK 2	P03652910	CK 4	P03652914

PT100 Ω TEMPERATURE PROBES

SP 10	P03652712	SP 12	P03652714
SP 11	P03652713	SP 13	P03652715
		SP 14	P01655020

Handle for K TC extension	P03652912	Bag	P01298075
Connector for K thermocouple	P03652925	Metal case	P01298071
Shockproof sheath + Multifix	P01654252	Dataview software	P01102095
Multifix	P01102100Z	Bluetooth BLE / USB modem for PC	P01654253
Mains adapter	P01651023	4 x AA/LR6 NiMH Batteries + Battery charger	HX0053

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