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http://www.sefram.fr

SEFRAM DAS 220

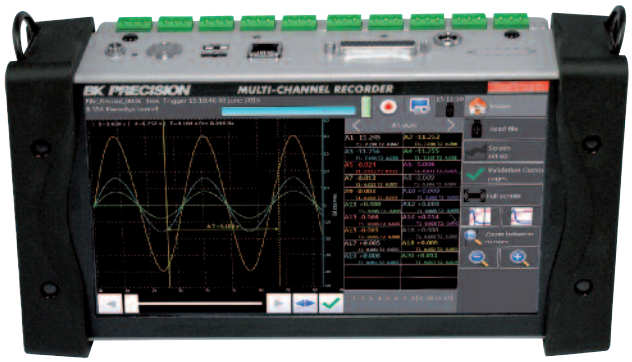
Multi Channel Handheld Recorder

Capabilities

- 10 analogue channels
- Input : voltage, thermocouple, Pt100-1000, current (with optional adapter), resistance
- Voltage: from 1mV to 200V (±100V)
- Temperature: thermocouples (all types), Pt100/Pt1000 (2 or 3 wires)
- 16 Bit vertical resolution
- Max sampling rate: 1ms (1kHz)
- 12 logical channels
- 4 alarms (output)
- 4 logical function input with counter & frequencymeter capability
- 10" TFT panoramic touch screen
- Internal hard drive : 32 GB
- Interfaces: USB, Ethernet, WiFi (option)
- Lithium-ion battery (factory option) : 15h autonomy
- DasLab software (license free)
- Safety: IEC61010 CAT I 100V

NEW

2 YEAR WARRANTY



DAS 220

A multi channel handheld recorder dedicated to process

The new DAS220 recorder has been designed to measure all parameters you can find in a process: voltage measurements, measurements on sensors (0-10V), temperature measurements (thermocouple, Pt100-Pt1000), current measurements (with optional shunt), resistance measurement, counter, frequency.
You can view directly the results of measurements (graphs, numerical values) and memorize your results in the recorder memory or in a USB memory stick. The data transfer and data processing can be done later with a personal computer using the licence free DasLab software.

User-friendly interface

The DAS220 is equipped with a panoramic 10" touch screen: the user interface becomes absolutely interactive. The icons and symbols used makes the browsing very easy and will save your time.

Multiple applications

The DAS220 recorder is really a general purpose recorder for process applications:

- multi channel temperature monitoring and recording
- 0-10V sensors monitoring and recording
- voltage measurements
- pulse counting
- 4-20mA measurement and monitoring (with optional shunt).

Selection guide	DAS220	DAS220BAT
10 analogue multiplexed channels	●	●
12 logical channels input	●	●
Internal battery (8h autonomy)	-	●
WiFi interface (USB dongle)	option	option

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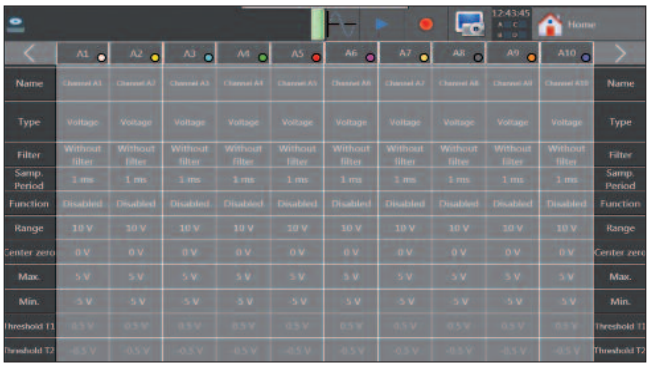
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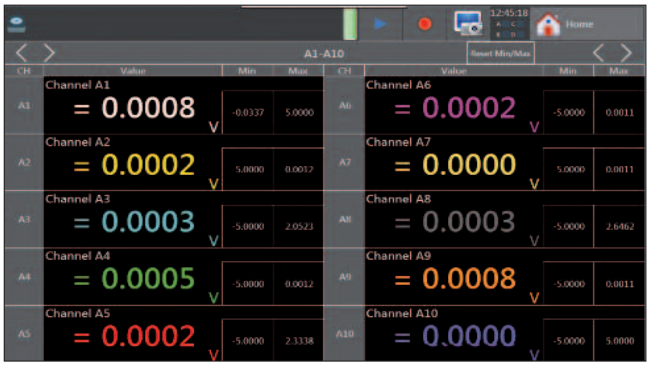
Multi Channel Handheld Recorder



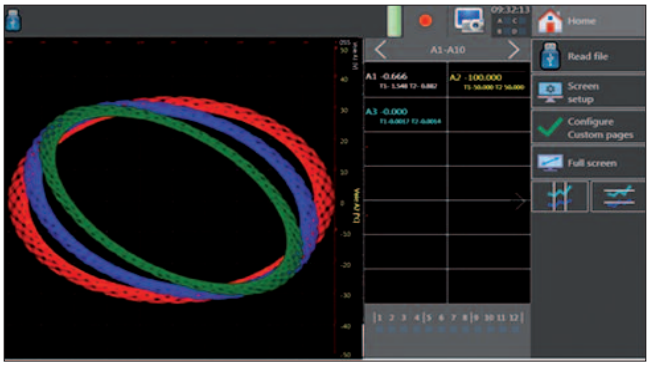
Setup: self-explanatory icons to guide the user



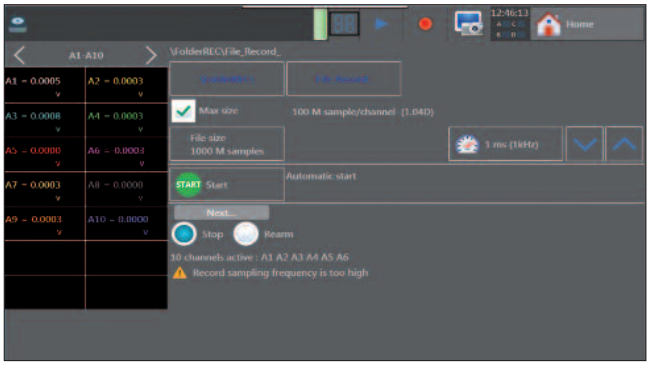
Channels setup: all parameters can be displayed on a single screen



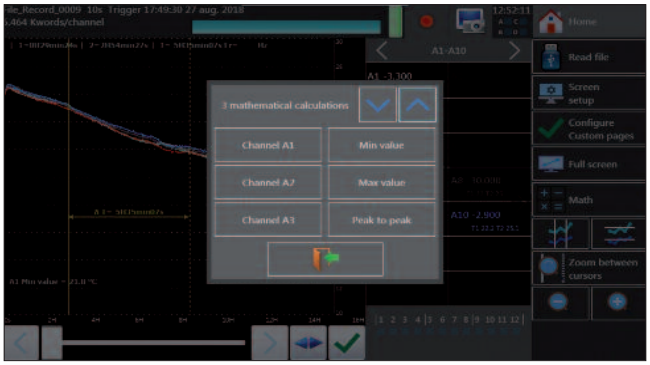
Numerical display of measurements



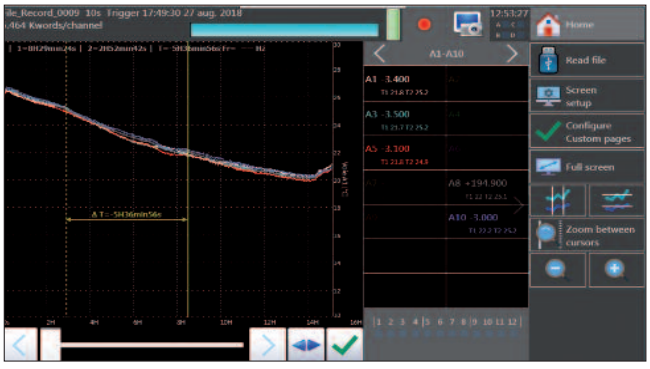
XY mode



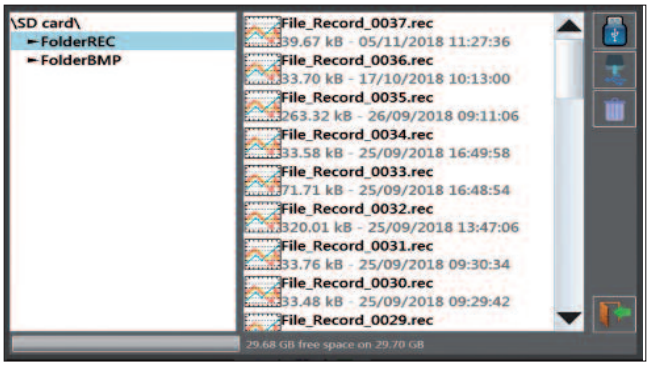
Trigger: multiple choice and combination of threshold, channels and conditions



Math calculation between channels



Measurement display with zoom and cursors



File management with the DAS220

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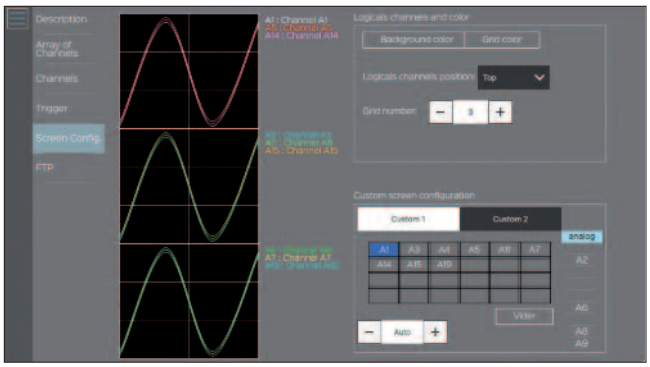
Multi Channel Handheld Recorder

SEFRAM DasLab Software

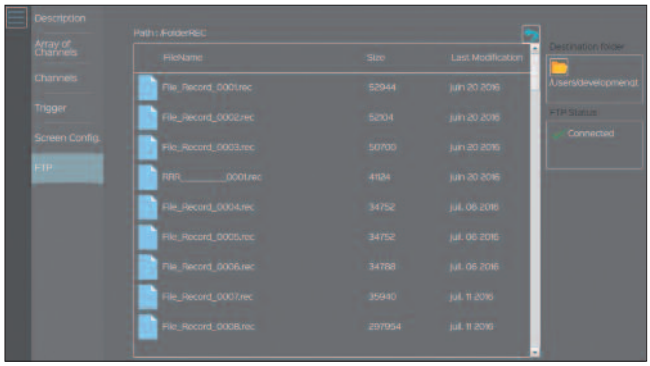
The new DasLab software for PC (under Windows) is suitable for:

- Managing recorder setup (online & offline)
- Remote setup of the DAS220
- Managing & downloading files (records, setup) from the recorder

DasLab is a licence free software and can be downloaded from Sefram website.
The link between your DAS220 and your computer can be set up through the Ethernet interface or the WiFi interface (option).



DasLab : Remote setup

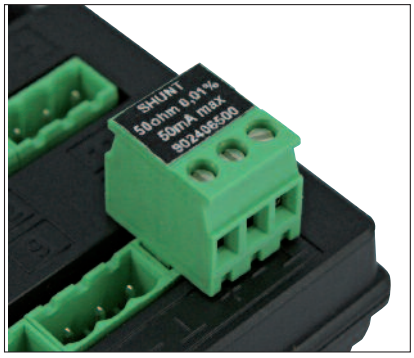


DasLab: files management

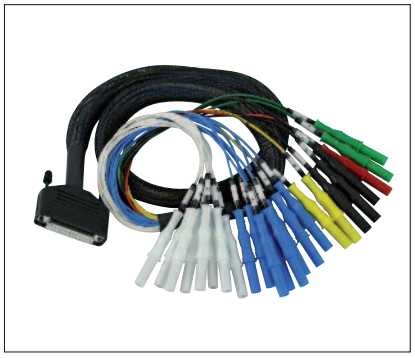


DasLab: channels setup

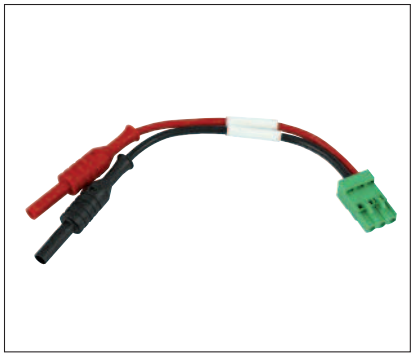
Optional accessories for all uses



P/N: 902406500
Shunt 50 Ohms for current measurements 4-20mA



P/N: 902407000
Cord for logic channels



P/N: 902407100
Connecting cord with female banana plugs



P/N: 902408000
Carrying case for the device and its accessories

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SEFRAM DAS 220

Multi Channel Handheld Recorder

TECHNICAL SPECIFICATIONS

Number of channels: 10 channels,

INPUT SPECIFICATIONS

DC Voltage

Ranges:	1mV (±0,5mV) to 200V (±100V)
Maximum input voltage:	100V DC
Accuracy:	0,1% of the full scale ±10µV

TEMPERATURE WITH THERMOCOUPLES

Sensors	Range
Couple J	-210°C to 1200°C
Couple K	-250°C to 1370°C
Couple T	-200°C to 400°C
Couple S	-50°C to 1760°C
Couple B	200°C to 1820°C
Couple E	-250°C to 1000°C
Couple N	-250°C to 1300°C
Couple C	0°C to 2320°C
Couple L	-200°C to 900°C

Cold junction compensation: ±0,5°C

TEMPERATURE WITH PT100 - PT1000

Current:	1mA (Pt100) & 100µA (Pt1000)
Range:	-200°C to 850°C
Measurements:	2 and 3 wires
Accuracy (at 20°C):	0,3°C ±0,1% of reading
Compensated resistance with 2 wire:	30 ohms max.
Compensated resistance with 3 wires:	50 ohms max

RESISTANCE

Ranges:	1kΩ and 10kΩ
Accuracy:	1Ω (range 1kΩ) and 10Ω (range (10kΩ)

ACQUISITION - SAMPLING

Resolution:	16 bit
Acquisition system:	scanner, one sample per channel
Sampling rate:	1ms to 20mn for V >50mV 2ms to 20mn for V ≤50mV, thermocouples & Pt100-Pt1000
Trigger:	date, delay, threshold, combination of thresholds (and/or), word on logical channels (and, or, slope, level)
Pre-trigger :	variable from 0 to 100k samples

ADDITIONNAL I/O

Logical channels

Number:	12
Maximum permitted voltage:	24V Cat I
Input impedance:	4,7kΩ
Sampling rate:	1ms max.

LOGICAL FUNCTION INPUT

Number of channels:	4 (K1 to K4)
Maximum permitted voltage:	24V Cat I
Input impedance:	4,7kΩ
Sampling rate:	1ms max.
Pulse counter:	0 to 10000000
Frequency measurement:	1Hz to 10kHz

ALARMS (OUTPUT)

Number:	4 alarms (A, B, C, D)
Output level:	0-5V

Supplied with: a main adaptor 100/240V, manual (CD-ROM), 1 male connector with 25 pins mâle and cover, connectors, a stylus, a soft wipe, a screwdriver.

For ordering the DAS220 with internal battery: DAS220 BAT

INTERNAL STORAGE

Internal flash drive size:	32GB min
Maximum file size:	2GB

INTERFACES

USB:	2 x USB type A
Ethernet:	10/100base-T with RJ45 socket
Wifi:	with optional USB dongle

GENERAL SPECIFICATIONS

Display:	10" TFT touch screen LCD, backlighted, 1024 x 600 dots
Power supply:	15V / 4A max with main adapter (100/240VAC)
Battery:	factory option, non removable, Lithium-ion
Autonomy with battery:	15h with standby mode, 10h without stand-by mode
Operating temperature:	0°C to 40°C, 80% RH (no condensation)
Storage temperature:	-20°C to 60°C
Dimensions:	210 x 295 x 105mm
Weight:	2,5kg
Safety:	Cat I 100V, according to IEC61010-1
Warranty:	2 years

ACCESSORIES AND OPTIONS

Rugged carrying case:	**P/N: 902408000**
Wifi option (USB dongle):	**P/N: 902402000**
12 isolated logical channels :	**P/N: 984405500**
Logical channels patch cord:	**P/N: 902407000**
4-20mA / 50 ohms shunt:	**P/N: 902406500**
19" rackmount kit:	**P/N: 902209000**
Din mount kit:	**P/N: 902201000**

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For assistance and ordering

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afaq ISO 9001 Qualité AFNOR CERTIFICATION 1997/7001

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