Sefram

SEFRAM DAS 240

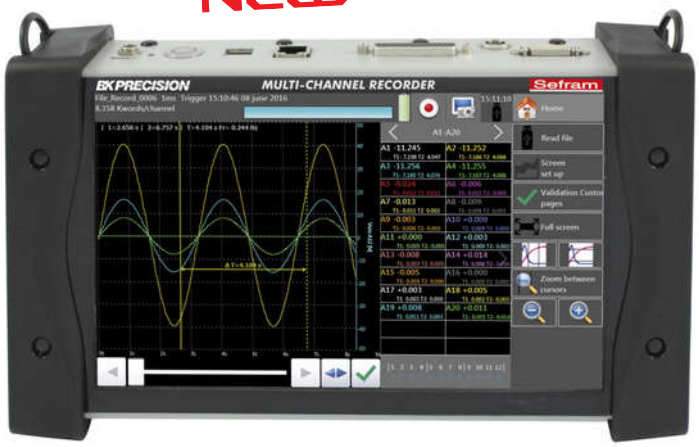
Make sure to visit our Website
http://www.sefram.fr

Multi Channel Handheld Recorder

Capabilities

- 20 to 200 analogue channels
- Input: voltage, thermocouple, Pt100-Pt1000, 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 & frequency meter 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 (licence free)
- Safety: IEC 61010 CAT I 100V

NEW



DAS 240

A multi channel handheld recorder dedicated to process

The new DAS240 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.

A modular solution

The DAS240 is supplied with 20 analogue channels, but you can add 180 analogue channels, by steps of 20. All modules (20 channels) are strictly identical and can perform the same measurements (voltage, temperature, resistance, current).



User-friendly interface

The DAS240 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 DAS240 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).

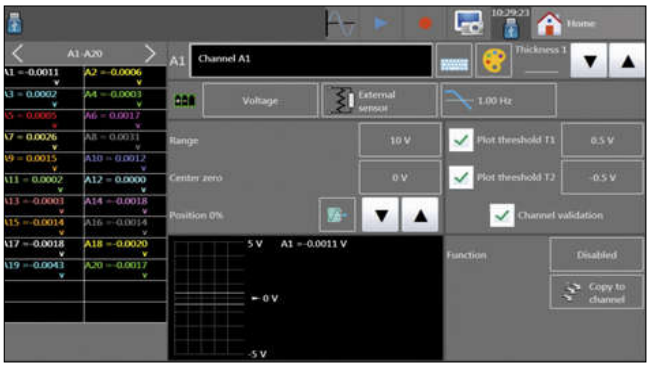
Selection guide	DAS240	DAS240BAT
20 analogue multiplexed channels	●	●
12 logical channels input	●	●
Internal battery (15h autonomy)	-	●
20 channels module	option	option
WiFi interface (USB dongle)	option	option

CE

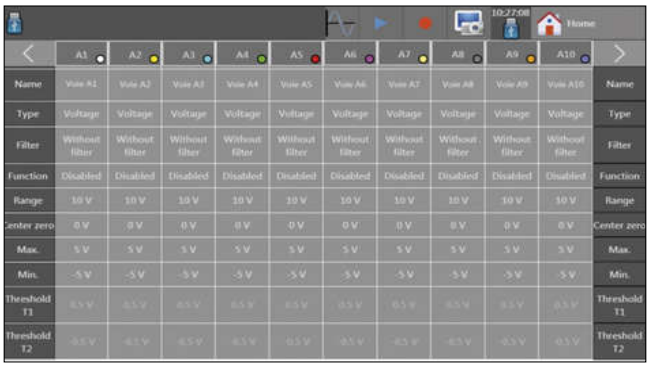
Sefram

SEFRAM DAS 240

Multi Channel Handheld Recorder



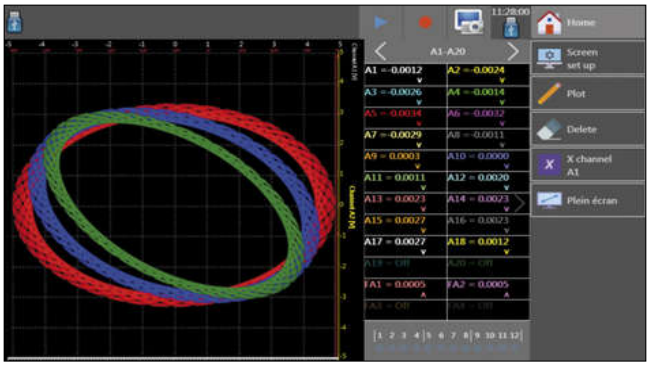
Setup: self-explanatory icons to guide the user



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



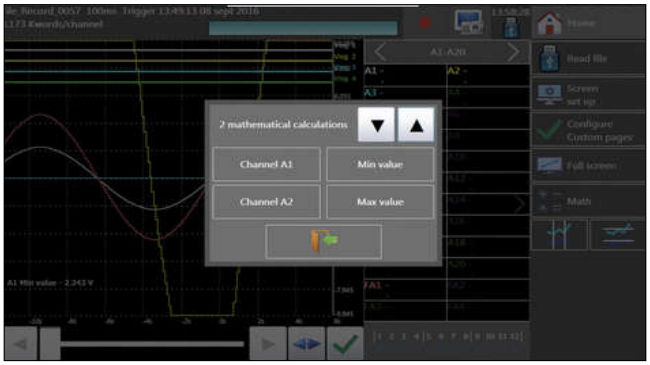
Numerical display of measurements



XY mode



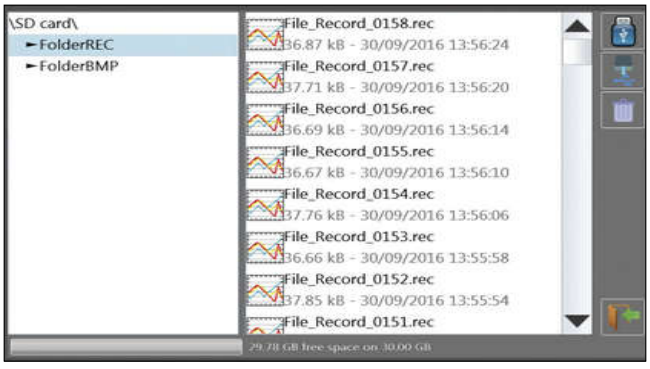
Trigger: multiple choice and combination of threshold, channels and conditions



Math calculation between channels



Measurement display with zoom and cursors



File management with the DAS240

CE

Sefram

SEFRAM DAS 240

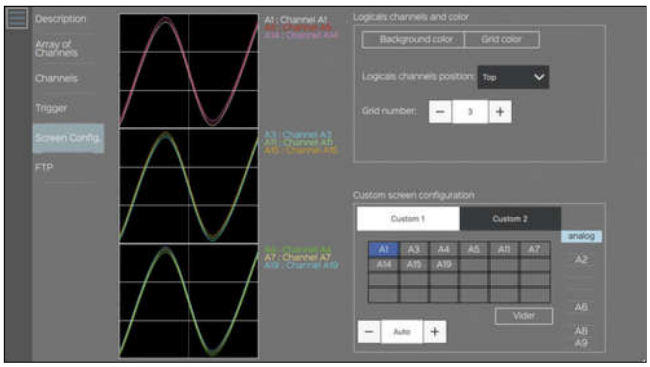
Multi Channel Handheld Recorder

SEFRAM DasLab Software

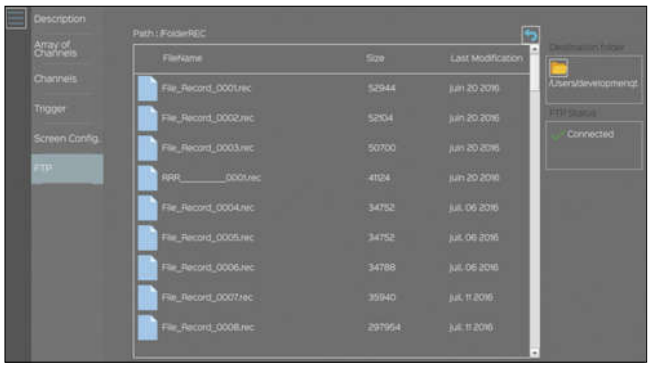
The new DasLab software for PC (under Windows) is suitable for:

- Managing recorder setup (online & offline)
- Remote setup of the DAS240
- Managing & downloading files (records, setup) from the recorder

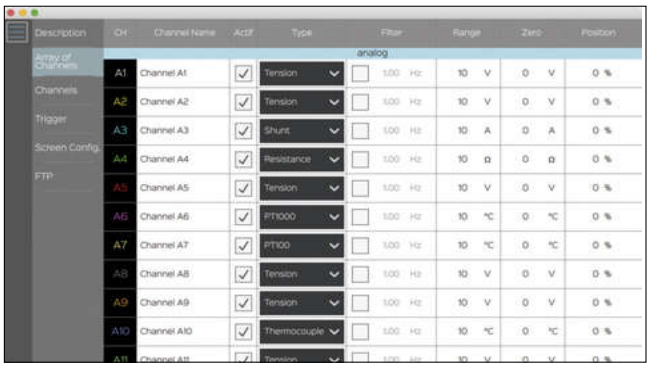
DasLab is a licence free software and can be downloaded from Sefram website.
The link between your DAS240 and your computer can be set up through the Ethernet interface or the Wifi interface (option).



DasLab : Remote setup



DasLab: files management



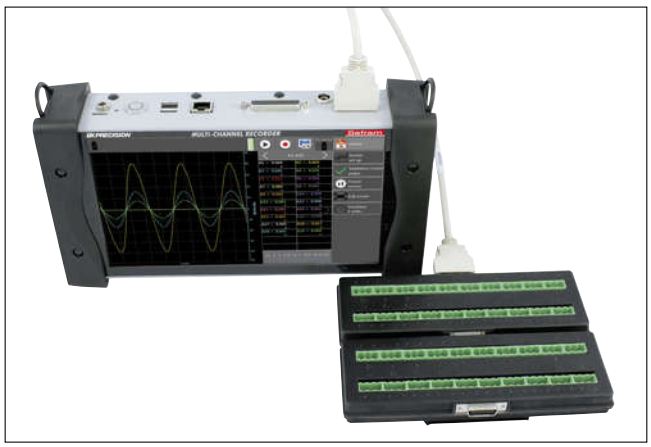
DasLab: channels setup

DAS 240: a flexible solution with the optional 20 channels modules

Your applications needs more measurement channels? The DAS240 is a flexible and scalable system!
Supplied with 20 measurement channels, you can add up to 180 channels, by increment of 20, for reaching a total of 200 channels. The 20 channels modules (P/N: 902401000) are all versatile: you can measure voltage, temperature with thermocouples, Pt100-1000 and are supplied with fast connectors and a mechanical system to fix them together.



20 channels module (P/N: 902401000)



DAS240 equipped with 40 channels

CE

Sefram

SEFRAM DAS 240

Multi Channel Handheld Recorder

TECHNICAL SPECIFICATIONS

Number of channels: 20 channels, expandable to 200 with optional 20 channels modules

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 male and cover, 1 cable (70cm) for measurement module connection, 1 measurement module (20 channels) with connectors, a stylus, a soft wipe, a screwdriver.

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:	66 x 298 x 176mm
Weight:	1,5kg
Safety:	Cat I 100V, according to IEC61010-1
Warranty:	2 years

ACCESSORIES AND OPTIONS

902401000:	20 channels module
902408000:	Rugged carrying case
902402000:	Wifi option (USB dongle)
984405500:	12 isolated logical channels board
902407000:	Logical channels patch cord
902406500:	4-20mA / 50 ohms shunt
902409000:	19" rackmount kit:



CE

For assistance and ordering

Sefram

afaq ISO 9001 Qualité AFNOR CERTIFICATION 1997/7001

32, rue Edouard Martel - BP55- 42009 - St Etienne - cedex 2
Tél. +33 (0) 4.77.59.01.01
Fax. +33 (0) 4.77.57.23.23
Web : www.sefram.fr - e-mail : sales@sefram.fr