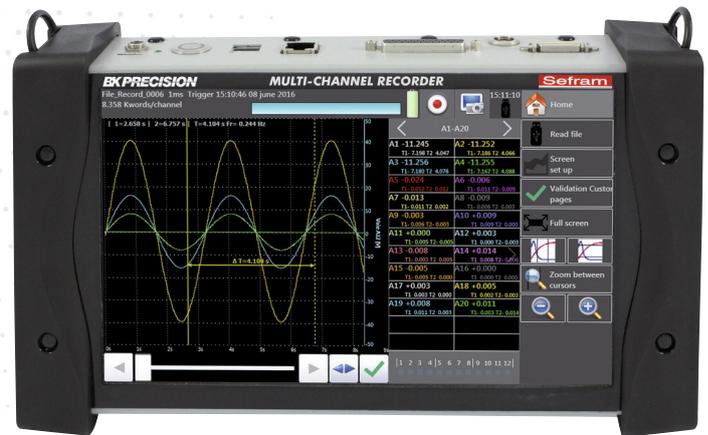


SEFRAM DAS240 Multi Channel Handheld Recorder

Capabilities :

- 20 to 200 analogue channels
- Input: voltage, thermocouple, Pt100-Pt1000, current (with optional adapter), resistance
- Voltage: from 1 mV to 200 V (± 100 V)
- Temperature: thermocouples (all types), Pt100-Pt1000 (2 or 3 wires)
- 16 Bit vertical resolution
- Max sampling rate: 1 ms (1 kHz)
- 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): 15 h autonomy
- DasLab software (licence free)
- Safety: IEC 61010 CAT I 100 V
- LabWiew® driver
- Supplied with calibration report



DAS 240

A multi channel handheld recorder dedicated to process

The new DAS40 recorder has been designed to measure all parameters you can find in a process: voltage measurements, measurements on sensors (0-10 V), 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 an 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 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
- 0-10 V sensors monitoring and recording
- voltage measurements
- pulse counting
- 4-20 mA measurement and monitoring (with optional shunt).

A modular solution

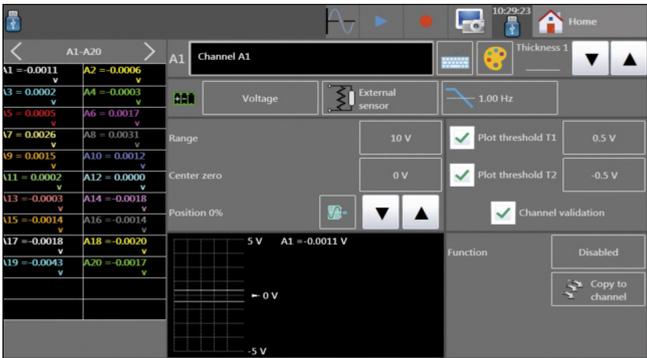
The DAS240 is supplied with 20 analogue channels, but you can add 180 analogue channels, by steps of 20. All modules (20 channels) are strictly identical and can perform the same measurements (voltage, temperature, resistance, current).



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

Multi Channel Handheld Recorder



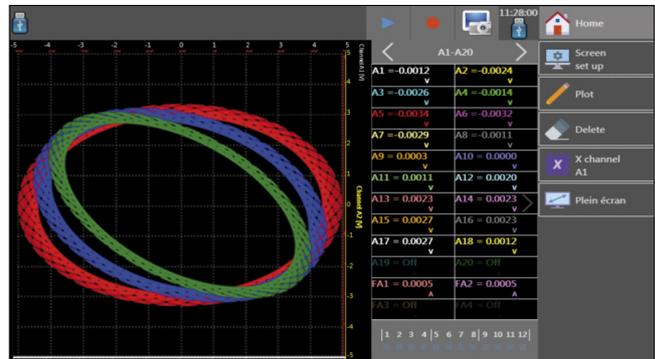
Setup: self-explanatory icons to guide the user



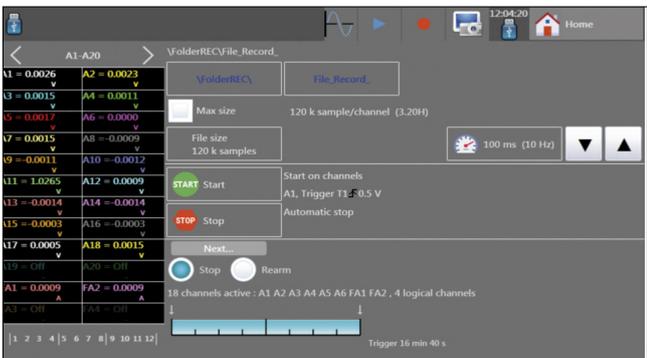
Channels setup: all parameters can be displayed on a single screen



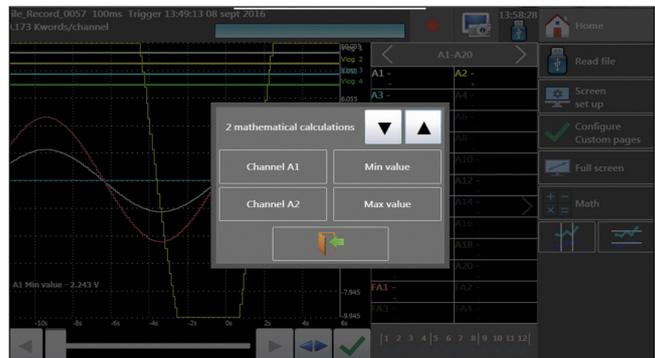
Numerical display of measurements



XY mode



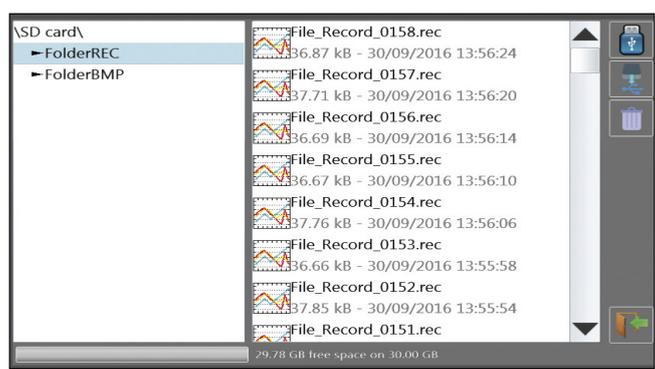
Trigger: multiple choice and combination of threshold, channels and conditions



Math calculation between channels



Measurement display with zoom and cursors



File management with the DAS240

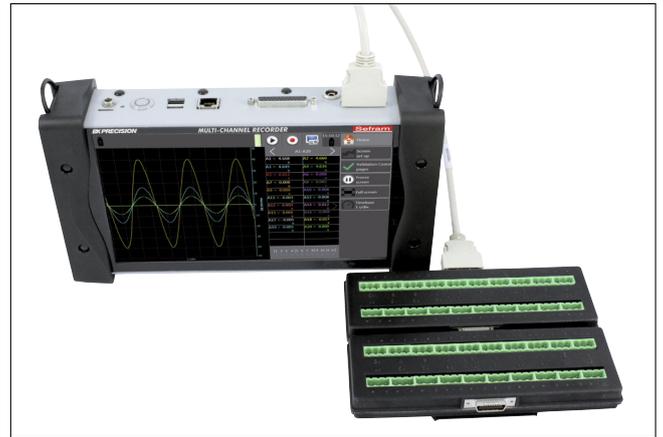
Multi Channel Handheld Recorder

■ 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

Multi Channel Handheld Recorder

TECHNICAL SPECIFICATIONS

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

INPUT SPECIFICATIONS

DC Voltage

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

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
Couple R	-40 °C to 1500 °C

Cold junction compensation: $\pm 0,5$ °C

TEMPERATURE WITH Pt100 - Pt1000

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

RESISTANCE

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

ACQUISITION - SAMPLING

Resolution: 16 bit
 Acquisition system: scanner, one sample per channel
 Sampling rate: 1 ms to 20 mn for V >50 mV
 2 ms to 20 mn for V \leq 50 mV, 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 100 k samples

ADDITIONNAL I/O

Logical channels

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

LOGICAL FUNCTION INPUT

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

ALARMS (OUTPUT)

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

Supplied with: a main adaptor 100/240 V, 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.

DasLab software and the LabView® driver can be downloaded from our website: www.sefram.fr

INTERNAL STORAGE

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

INTERFACES

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

GENERAL SPECIFICATIONS

Display: 10" TFT touch screen LCD, backlighted, 1024 x 600 dots
 Power supply: 15V / 4 A max with main adapter (100/240VAC)
 Battery: factory option, non removable, Lithium-ion
 Autonomy with battery: 15 h with standby mode, 10 h 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 100 V, according to IEC61010-1
 Warranty: 2 years

ACCESSORIES AND OPTIONS

- P/N: 902401000 20 channels module
- P/N: 902408000 Rugged carrying case
- P/N: 902402000 Wifi option (USB dongle)
- P/N: 984405500 12 isolated logical channels board
- P/N: 902407000 Logical channels patch cord
- P/N: 902406500 4-20 mA / 50 ohms shunt
- P/N: 902409000 19" rackmount kit
- P/N: 978553000 Power supply



For assistance and ordering



FTDAS240A01 - Specifications can be updated without notice