Capabilities

- 2 to 6 analogue channels
- Universal input
- DC, AC+DC RMS voltage measurement
- Frequency, counter
- Temperature: thermocouple, Pt100/Pt1000*
- Power analysis function (up to 400Hz for DAS60)
- 16 logical channels
- 14-bit resolution
- 10" TFT panoramic LCD touch screen
- 1 Ms/s sampling rate
- 100 kHz bandwidth
- 32 GB internal hard disk (64GB for DAS60)
- 32 Mword memory
- Interfaces: 2 x USB, Ethernet
- Lithium-ion battery
- Autonomy: up to 9.5 hours.
- 110mm Thermal printer module*
- IEC 1010 CAT III 600V

* factory options: - printer module (all models)
- Pt100 / Pt1000 (DAS30 / 50)

Multifunction recorders for all your applications

The new DAS30 / 50 / 60 series recorders have been designed to meet the requirements of all applications in industry (IEC 61010, CAT III 600V). You can view your measurements (traces, digital values) and record directly in the internal memory or into a USB memory stick. Using Sefram software, you can transfer easily your records on a computer.

Easy-to-use

Thanks to the new user interface combined with its large touch screen LCD, the portable DAS recorders are design for ease of use for a wide range of data recording applications and easy transfer of your records.

Universal input

The new DAS30 / 50 / 60 recorders offer universal input, which are convenient for all types of signals:
- voltage ranges from 1mV to 1000V DC or 425Vrms
- temperature (thermocouples) and Pt100/Pt1000*
- counter, frequency
- current (with optional shunt)

Typical applications

The new DAS30 / 50 / 60 recorders are general purpose and multifunction recorders and are suitable for many applications:
- maintenance/failure diagnostic on electrical systems
- voltage, current, temperature recording and monitoring
- power analysis for single-phase and three-phase systems

Selection guide

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Factory options

110mm thermal printer module

It’s possible to install on Sefram DAS50 / 50 / 60 recorders a thermal printer module (110 mm width, 10 meters thermal paper roll).

Pt100/Pt1000 board

This board is included in the DAS60 and is a factory option for DAS30 / 50. It adds 2 channels dedicated to Pt100/Pt1000 platinum resistance measurements, with 2 wires, 3 wires or 4 wires setup. Using a 20 bit analog to digital converter, this card will provide an excellent accuracy and resolution for temperature measurement.

### Channels setup
- One screen with colors to differentiate channels
- Oscilloscope mode
- Digital display of measurements
- XY mode
- Trigger: several type of trigger, one channel, on a level, slope, several channels or combined conditions
- With the thermal printer module, you can set up your print
SEFRAM VIEWER

This licence free software is supplied with each recorder. It allows the visualization of the recordings and the data transfer to other applications. SEFRAM Viewer makes the acquired signal analysis easier.

Capabilities
- Curve printing
- Display of values (text)
- Cursors and zoom
- File concatenation
- 8 math calculations
- Up to 120 characters text notes
- Bitmap, Excel®, txt, csv export
- Easy setup of curves display

FLEXPRO™: a powerful software for your data analysis.

With Flexpro®:
- More than 100 functions of statistical and math analysis
- Powerful graphical display
- Measurement report editing

ENERGY / POWER ANALYSIS

A very powerful analysis for single-phase or three-phase networks. Analysis is provided with Fresnel diagram or oscilloscope mode.
The DAS60 can work with 400Hz networks and has a trigger selection function.

Example of a three-phase network.

Real time display of signals and harmonics (up to rank 50)

Setup of parameters to measure or calculate.
SPECIFICATIONS – UNIVERSAL INPUT

Number of channels: 2 (DAS30), 4 (DAS50), 6 (DAS60)

VOLTAGE

Bandwidth: 100 kHz
DC voltage ranges: ± 500 VDC or ± 440 VAC
Maximum input voltage: ± 500 VDC or ± 440 VAC
Max offset: ± 5 VDC (up to ± 500 VDC)
Accuracy: ± 0.1% of range; ± 10 mV / ± 0.1% offset

TRMS AC-DC ranges: from 200 mV to 424 V
Bandwidth (3 dB): 5 Hz - 500 Hz
Response time: 100 ms typical, 40 ms to 50 Hz
Crest factor: 2.2 and 600 V peak voltage

FREQUENCY

Carrier frequency: 50 Hz
Time constants: 0.1 ms, 1 ms, 10 ms
Frequency range: 0.1 Hz to 100 kHz
Slope: 40 dB/decade

MAXIMUM INPUT VOLTAGE

Input impedance (DC): > 25 MΩ
Isolation between frame ground: > 100 MΩ
Programmable digital filters: 10 Hz, 1 Hz, 0.1 Hz, 0.01 Hz, 0.001 Hz
Sampling rate: The same sampling rate as analogue inputs.

CURRENT

Current: 1 mA for Pt100 and 100 μA for Pt1000
Resolution: 20 bits
Temperature range: -200°C to +85°C
Temperature accuracy: ±0.2°C

LOGIC INPUT

Channels: 16
TTL – Max voltage: 24V
Sampling rate: The same sampling rate as analogue inputs.
Sensor supply: 9 to 15 V
Alarms 2: A & B 0-5 V output.

PT100 / PT1000* INPUT (factory option for DAS30 / 50)

Number of channels: 2
Current: 1 mA for Pt100 and 100 μA for Pt1000
Resolution: 20 bits
Temperature range: -200°C to +85°C
Accuracy at 20°C: ±0.2°C

PROGRAMMABLE DIGITAL FILTERS

The same sampling rate as analogue inputs.

MEMORY

Memory length: 32 M words in segments of up to 128 Blocks
Resolution: 14 bit

FILE SYSTEM

File system: FAT32
Setup backup: unlimited on the hard disk
Storage: 32 GB (solid state) for DAS30 / 50 and 64 GB for DAS60

GENERAL SPECIFICATIONS

Display: 10 inches TFT LCD coloured touch screen
Zoom, cursors, dV, dT and zoom between cursors
Calculation Functions: y=ax+b, y=-x+b, y=ax/xb+c
Automatic measurements: 20 automatic measurements (F, T, Vpp, Tm...)
Interfacing: 2 x USB port, Ethernet
Power supply: 100 to 240 VAC, output 15 VA max.
Battery (factory installed): Lithium Ion 10.8 V, 6.5 Ah.
Autonomy: Typically 9h30 min after a complete charge
Charging time: 4 hours without screen saver
Dimensions & weight: 295 x 210 x 105 mm, 2.5 Kg
Operating temperature range: 0°C to 40°C
Max. RH: 80% without condensation.
Storage temperature range: -20°C to 60°C
Warranty: 2 years
Safety: IEC 61010 – CAT III 600V

OPTIONAL ACCESSORIES

Accessory clamps
- 3000 AAC, 0.333 mV/A, ø 150 mm / Flex
- 2000 AAC, 1 mV/1 A, ø 70 mm.
- 1200 AAC+DC, 1 mV/1 A, ø 50 mm.
- 1000 AAC, 100 mV/1 A, ø 15 mm.
- 200 AAC, 10 mV/1 A, ø 15 mm.

Shunts (with banana plugs)
910071000 Shunt CA 0.01 ohm: 3 A
910072000 Shunt CA 0.1 ohm: 1 A
989970000 Shunt CA 0.001 ohm: 0.001 A
989960000 Shunt CA 0.01 ohm: 0.1 A
912008000 Shunt CA 0.1 ohm: 0.1 A

Shunts (with wires)
207030501 Shunt 0.01 ohm: 30 A max
207030500 Shunt 0.01 ohm: 50 A max

Rugged carrying case
903010000 Rugged carrying case for DAS50
906002000 Rugged carrying case for DAS60

FLEXPRO software
916002000 FlexPro View
916002500 FlexPro Standard
916002300 FlexPro Professional
916002400 FlexPro Developer Suite

Printer module (factory option)
909030000 Thermal printer module for DAS30 / 50
906003000 Thermal printer module for DAS60

Consumables
837500526 Thermal paper roll (10m)

Shunt 0.01 ohm: 500 A max
Shunt 0.1 ohm: 1 A
Shunt CA 0.1 ohm: 10 A
Rackmount kit
903011000 Rackmount kit for DAS50 / 50
906001000 Rackmount kit for DAS60

For assistance and ordering:
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Fax. +33 (0).4.77.59 23.23
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