

**Sefram**  
Sefram

# SEFRAM

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## DAS 800 / 800SV

**Make sure to visit  
our Website**

<http://www.sefram.fr>

## 6 channels Data Acquisition Solution

### Capabilities

- 6 isolated analogue channels
- Measurement up to 500V AC or 1000VDC
- 16 logical channels
- 15.4 inches panoramic TFT touch screen
- 500Gb hard disk, with fast transfer
- Interface: Ethernet, 6 x USB, VGA
- Internal battery option
- WiFi option\*
- Option: Bus CAN and LIN analysis
- IEC1010: CAT III - 600V

**DAS 800SV** : no cooling fan version, for special polluted environmental conditions.



### Universal inputs

The DAS800 is configured with 6 analogue channels and 16 logical channels. The input board is suitable for all applications: DC and AC voltage, frequency, temperature, current (with shunts or clamps)

### A panoramic touch screen to ease the operation

With its 15.4 inches touch screen, using the DAS800 is like a game: the man-machine interface has been designed to be intuitive, all menus are clear and simple and the user's manual can be displayed on the recorder if needed.

### Various analysis functions and fast acquisition on disk

The DAS800 will provide many automatic measurements, various triggers, the power analysis mode,... All is done to simplify the analysis of complex signals. The real time acquisition on hard disk can record at 6Ms/s for one channel or 1Ms/s for 6 channels. Take benefit of this feature for your hi speed diagnostics.

### A connected instrument

With its 6 USB interfaces, the LAN interface or through WiFi communication, you can remote control your device or download your records. With Virtual Network Computing software (not included), view and control your DAS800 from your computer or your tablet.... Just like if you have the recorder in front of you!

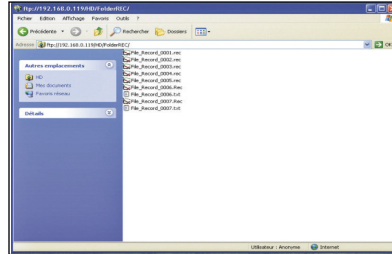
## ► A modular concept for all your applications

Communication and simplified data export :



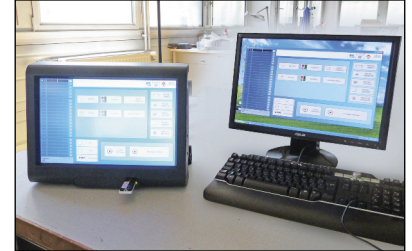
With Virtual Network Computing software, you remote control your DAS 800 from a computer or a tablet.

FTP : easy transfer of records



FTP or TCP-IP transfer of files and recorded data display.

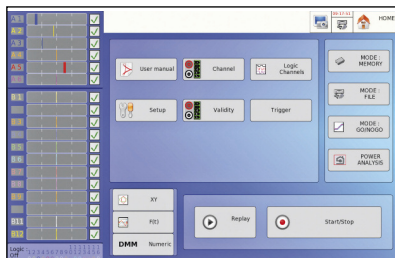
WiFi



With the WiFi interface (option) you can take the best benefit of remote control of your device.

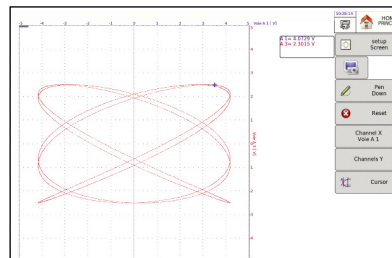
All functions, all modes can be remote controlled.

Several operating modes



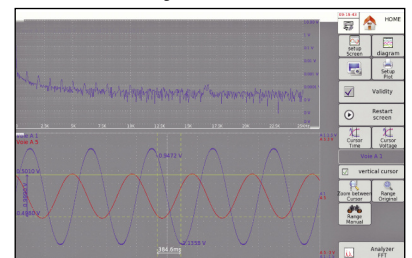
Expert mode : user will access to all parameters of the setup.  
User mode: restricted access.

XY mode with pen-up and pen-down.



With an efficient XY mode, your DAS 800 will replace your old analogue XY plotter.

FFT Analysis



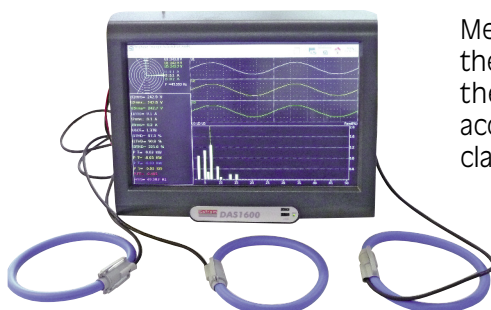
Real time FFT analysis.

## ► Energy / Power Analysis

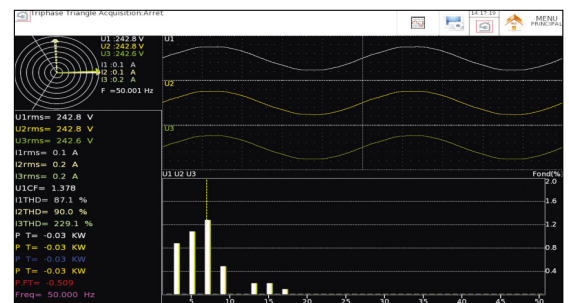
A very powerful analysis for single phase, dual phases or three phases networks. Analysis is provided with Fresnel diagram or oscilloscope mode.

### Capabilities

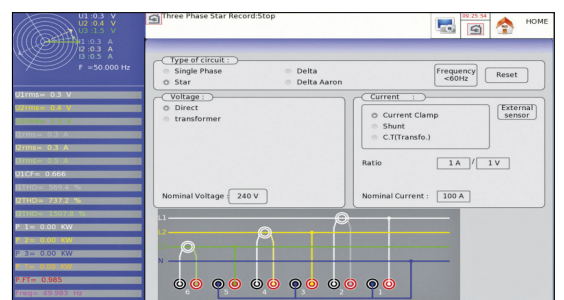
- Single phase, dual phases, three phases networks
- Up to 24 parameters memorized (U, I, W, Wh, ...)
- Network frequency: 40, 50, 60, 400, 1000 Hz
- Fresnel Diagram
- Oscilloscope mode
- Harmonics up to rank 50
- Memorization of harmonics
- 16 calculated values : mean value, RMS value, peak value, crest factor, THD, DF, active power, apparent power, reactive power, power factor (cos), energy,...
- Real time word file of calculated values



Measurements are done with the voltage input (direct) of the universal board and accessories clamps (standard clamps or flexible clamps)



Harmonics up to rank 50 (calculation and memorization)





# DAS 800 / 800SV

Data Acquisition Solution

## COMMON FEATURES

### DISPLAY

15,4 inches TFT touch screen, with backlight  
Resolution 1280 x 800 dots  
fit) and XY display capability  
Functions: zoom, cursors, zoom between cursors  
Math and scaling functions ( $Y = aX + B$ )  
20 automatic measurements available

### MEMORY

Memorization of setup  
Memory 128 Mwords, in segments  
Internal hard disk 500Gb, with fast transfer ( 6Ms/s)

### INTERFACES AND I/O

Interfaces 6 x USB (2 on the front panel, 4 on the rear panel),  
VGA, Ethernet  
Logical channels 16 logical channels (V max: 24V,  $Z_{in} = 4,7k\Omega$ )  
Sensor supply 12V / 0,2A max (non floating)  
Alarm output 3 output, with 1 relay (24V/100mA)  
and 2 x TTL 5V

### POWER ANALYSIS FUNCTION

(this function can be used with one universal board and accessories for current measurements)

Networks single phase, dual phases, three phases  
Frequency 50-60Hz, 400Hz and 1000Hz  
Display oscilloscope, Fresnel diagram  
Harmonics calculated up to rank 50,  
with recording capabilities  
Measurements 24 measurements: U and I (mean values,  
RMS, peak), crest factor, power (active,  
reactive, apparent), power factor, harmonics,  
THD, DF, frequency, energy,...

### GENERAL AND ENVIRONMENT

Power supply 95VAC to 264VAC, 47Hz to 63Hz  
Consumption 47 VA max  
Operating temperature 0°C to +40°C  
Storage temperature -20°C to +60°C  
Maximum operating RH 80% max.  
Dimensions (without add. chassis) 298 x 394 x 218 mm  
Weight 8kg (10kg with add. chassis)

### MEASUREMENT BOARDS AND OPTIONS (\*= FACTORY OPTION)

984405500 16 isolated logical channels module  
910007000 Logical channels cords  
916001000 Battery option\*  
916004500 Wifi communication option  
916007000 Rack mounting kit for DAS1600/800

### CURRENT CLAMPS

A1257 Kit with 3 flexible clamps 30A/300A/3000A AC  
for three phases measurements  
A1287 Flexible clamp 30A/300A/3000A AC  
SP201 Current clamp 200A AC, 10mV/1A, D 15mm  
SP221 Current clamp 10A AC, 100mV/1A, D 15mm  
SP230 Current clamp 1200A AC, 10mV/1A, D 50mm  
SP261 Current clamp 1200A AC+DC, 1mV/1A, D 50mm  
SP270 Current clamp 2000A AC, 1mV/1A, D 70mm

Note : battery option is not available for DAS 800SV

### SPECIFICATIONS - UNIVERSAL INPUT BOARD

channels : 6 per board

### VOLTAGE

DC voltage ranges: 1mV to 1000 V  
Max offset:  $\pm 5$  ranges ( except 1000V)  
Accuracy:  $\pm 0,1\%$   $\pm 10$  V  $\pm 0,2\%$  offset  
TRMS AC+DC : 200 mV to 500 V  
Bandwidth (-3dB): 5Hz to 100kHz  
Crest factor : 2,2

### FREQUENCY

Sensitivity 300mV rms min.  
Duty cycle 10%  
Frequency range 10Hz to 100 kHz  
Basic accuracy 0,2% of full scale  
Maximum input voltage  $\pm 500$ VDC or 440V AC (sine)

### TEMPERATURE

Sensor	Using environment	Ranges
J	-20°C to 1200°C	20°C to 2000°C
K	-250°C to 1370°C	20°C to 2000°C
T	-200°C to 400°C	20°C to 500°C
S	-50°C to 1760°C	50°C to 2000°C
B	-200°C to 1820°C	50°C to 2000°C
E	-250°C to 1000°C	20°C to 1000°C
N	-250°C to 1300°C	20°C to 1000°C
W5	0 à 2320°C	50°C to 2000°C
Accuracy	Cold junction compensation : $\pm 1,25^\circ\text{C}$	

### SAMPLING

Resolution 14 bits  
Sampling rate 1M sample/sec per channel  
Memory length 32M word in segments of up to 128 Blocks  
Triggering Positive edge, negative edge, on logical  
input, delay, Go No Go.  
-100% à +100%

### BANDWIDTH

Analogue input bandwidth (-3dB) range 1V: 100kHz  
range  $\leq 50$ mV : 20kHz min  
Programmable digital filters 10Hz, 100Hz, 1kHz, 10kHz  
Input impedance (DC)  $>25$ M $\Omega$  for range  $<1$ V  
1M $\Omega$  for upper ranges  
150pF typ.  
Input capacitance  
Maximum input voltage between one channel and the frame ground  $\pm 500$ V  
between 2 terminals of one channel  $\pm 500$ V  
Isolation between frame ground  
and channel  $>100$ M $\Omega$  at 500VDC

### SHUNTS

910007100 Shunt 0,01 ohm 3A max  
910007200 Shunt 0,1 ohm 1A max  
989006000 Shunt 1 ohm 0,5A max  
912008000 Shunt 10 ohms 0,15A max  
989007000 Shunt 50 ohms 0,05A max  
207030301 Shunt 0,01 ohm 30A max  
207030500 Shunt 0,001 ohm 50A max

### TRANSPORTATION CASE (TROLLEY)

914007500 For DAS1600/800/800SV

### FLEXPRO® ANALYSIS SOFTWARE

100081 Flexpro® View (basic version)  
100082 Flexpro® Full

FTDAS800 A 01 - Specifications can be updated without notice



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For assistance and ordering

