DRS 600

Paperless Recorder

- **4, 8, 12 or 16 channels**
- **universal inputs: VDC / AC**rms*,
  Current (via shunts*);
  thermocouples and PT 100 sensors
- **bandwidth: 30 kHz ; resolution: 14 bits**
- **10,4“ TFT colour display**
- **maximum sampling frequency: 250 kS/s per channel**
- **calculation functions and mathematical combinations of channels**
- **massive storage capacity: super disk 120 MB, hard disk up to 10 Gbyte**
- **windows compatible acquisition software**
- **meets stringent industrial environment safety standards (EN 61010-1, CAT.III, 600 V)**

*) optional

Each of these solutions uses removable disks which allows you to access and process stored data on your PC while the DRS 600 is occupied acquiring new data The DRS 600 with its compact and lightweight design (less than 8 kg) is ideal for portable field applications. A rugged carrying case and protective cover are available for use in tough environments and industrial areas.
All inputs are accessible at the top of the recorder. A choice of models is available from 4 to 16 input channels.

The simple control keys are conveniently grouped and located on the front of the instrument.

The rotary encoder simplifies the selection and modification of values as well as the positioning of cursors on the screen.

The large back-lit TFT colour display provides excellent quality real time graphical display, even in difficult or remote conditions. Active channels are highlighted on the colour coded key, at the foot of the screen.

The DRS 600 features a built-in Superdisk disk drive – the new high capacity standard – capable of storing up to 120 MB of data. This drive is compatible with standard 1,44 MB disks

The optional 10 GB PCMCIA hard disk give the DRS 600 a massive data storage capacity.

This means that numerous signals can be continuously recorded over an extended period of time.

Paper on demand
The DRS 600 recorder has a built-in Centronics interface that can be directly connected to your choice of external monochrome or colour printers. This enables continuous or selective hard copies of your data to be printed in different modes (f(t), text,...) as required.

DRS 600 General Specifications

Channels : 4, 8, 12 or 16 - Logic channels : 16
Meas. : - VDC ranges : 1 mV to 1000 V
max. drift : ± 5 ranges (except 1000V)
accuracy : ± 0,1% ± 5 mV + 0.15% of offset
- VACrms* Ranges : 200 mV to 500 V
Bandwidth (-3 dB): 5 Hz to 25 kHz
Crest factor : 10 (for range < 5V)
- Temperature (Cold junction compensation accuracy: ±1°C

Sensor	Using environment	Ranges
Pt100 (2,3, 4- wire)	-200°C to 850°C	20°C to 1000°C
Couple J	-210°C to 1200°C	20°C to 2000°C
Couple K	-250°C to 1370°C	20°C to 2000°C
Couple T	-200°C to 400°C	20°C to 500°C
Couple S	-50°C to 1760°C	50°C to 2000°C
Couple B	-200°C to 1820°C	50°C to 2000°C
Couple E	-250°C to 1000°C	20°C to 1000°C
Couple N	-250°C to 1300°C	20°C to 1000°C
Couple W5	0°C to 2320°C	50°C to 2000°C

Sampling
Resolution : 14 bits
Sampling rate : max.: . 250 kS/s per channel and min. : 10 min.
Memory length: 2 MB segmentable in up to 128 blocks (16 MB* optional)
Triggering : positive or negative edge, window, slope (16 triggers)

Bandwidth
Analog inputs: 30 kHz (range > 500 mV) and 4 kHz (range < 500 mV)
Programmable filters: 1/10 kHz, 1/ 10/ 100 Hz, 10 s., 1/ 10 min.
Input impedance (DC): >25 MW (from 1 mV to 2 V); 2 MW (range> 2 V)
Max. inputs : - between 1 channel and the instrument ground: ± 500 V
- between 2 inputs of 1 channel : ± 500 V
Conform to EN 61010-1 600V CAT.III
Common mode rejection : >140 dB

Logic Inputs
Channels : 16 floating (50 V) - Input impedance : 300 k
TTL level - Maximum input : ± 7,5 V
Available functions :
- triggering of one acquisition, alarm
- triggering on logical words
- acquisition in memory mode

Printing
External A4 printer (200 mm) (PCL compatible)
Writing options :
- 7 pre-programmed grids
- user programmable formats
- entry of channel names, instantaneous values, recording name, ranges, date, relative or real time

Display
Back lit 10.4in. TFT LCD screen
- f(t) and X-Y format, text
- memory mode display
- zoom, cursors, V, t, zoom between cursors
Calculation functions : change of unit, y = a[x] + b, y =ax2 + b, y = a (x + b) + c, y = a logx + b, y = aE (cx) + b
Mathematical functions between channels : +, -, ÷, x
Configuration backup : 15 named set-ups
Alarm outputs : on 2 relays
Data storage : removable 120 MB LS-120 disk (optional 4 or 10 GB removable PCMCIA hard disk)

Interfaces : RS 232C, Centronics
Supply: 90 to 264 VAC (without selection), 47 to 63 Hz, 140 to 370 VDC
Power consumption : 100 W max.
EMC : EN 50082-2 industrial environment
Dimensions & Weight : 202 x 355 x 261 mm; 7.5 kg

Flex.Pro software offers unique powerful data processing and analysis

Flex.Pro is the modern software tool with powerful features :
- data importation from several sources
- file organisation by the Flex.Pro file manager
- data analysis with multiple mathematical functions
- graphical data displays in 2 or 3 dimensions, as tables or text
- use of cursors
- data export for insertion in word processor documents

Ordering Information

Supplied with : 2 banana plugs per input,1 DIN Pt100 sensor per input, 1 RS 232 connector and a basic Flex.Pro software

DRS 600/4	DRS 600 Recorder/ 4 channels
DRS 600/8	DRS 600 Recorder/ 8 channels
DRS 600/12	DRS 600 Recorder/ 12 channels
DRS 600/16	DRS 600 Recorder/ 16 channels

* Options (when ordering)

84162	-	VAC rms (200 mV à500 V)
84165	-	Memory extension
10002	-	Hard disk PCMCIA 4.3 Gb
10001	-	Hard disk PCMCIA 10 Gb
10003	-	Rack Mounting

Accessories

100082	-	Complete Flex.Pro Software
100091	-	LS 120 drive for PC (internal- IDE Bus)
100092	-	LS 120 drive for PC (external- parallel port)
10005	-	Carrying case
10006	-	Protective cover
100093	-	Keyboard
100094	-	Mouse
100095	-	External 12V converter
989007000	-	Shunt (0.05 A- 50 - 0.5%)
989006000	-	Shunt (0.5 A- 1 - 0.1%)
207030301	-	Shunt (30 A - 0,01 - 0.5%)
ELD.1050	-	Connection kit, 4 channels
ELD.1051	-	Multi-use connection kit, 4 channels
ELD.1052	-	Kit with differential probes, 700 V, 3 phase
ELD.1053	-	Kit with differential probes, 1500 V, 3 phases
ELD.1054	-	Kit with differential probe, 700 V, 1 phase
ELD.1055	-	Kit with differential probe, 1500 V, 1 phase
ELD.1056	-	Coaxial kit

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