DIGITAL PANEL METER CALCULATOR/TOTALLER

DIP530/DGN85S

ARDETEM **SFERE**





*The DIP 530/DGN85S is a highly accurate **programmable calculating and totalling panel meter**, with **IP 65** front face protection. The calculation function allows combining the value of the 3 measured channels to obtain a result. This result can then be integrated (totalling function), or sent on 1 of the outputs (analog or relay).*

• Calculation function of the type:
[(fct1. Var1 Op1 fct2. Var2) Op2 fct3 Var3] for the main register

• Possibility to use up to 5 intermediate registers of the same type as the main register to developp the equation.

• Function result integrator with programmable time basis and convertion factor.

• Totaller saved in case of power supply cut.

• Supply for 2-wire sensor 21Vdc/70 mA

Input:

• 3 bidirectionnal DC current inputs ±20mA, not isolated from one another.

• Linear or special curve in 20 points (programming in X and in Y), for each channel.

Display:

±100 000 pts for the instant value and 5 digits for the integrator.

Logic input: 1 logic input not isolated from the inputs, with programmable function:
0 reset of the totaller, integration stop and start, display hold, 0 reset of the min. and max.

Combinable option types:
(specify on order)

Isolated analog output:

Programmable on the instant or running total value of the result or on each of the 3 inputs.
Active current or voltage output.
Programmable scale ratio with enlarging effect.
Return value in case of sensor rupture and/or self-diagnosis error..

Relay output: 2 relays:
Programmable as pulse output with adjustable weight and duration, or as alarm with mode setpoint or window programmable on each of the input channels or on the instant or running total value of the result with:
• Recording of the alarms.
• Time delay and hysteresis adjustable on each setpoint.
• Messages associated with the alarms.

General data

Power supply

20...270 VAC 50/60/400 Hz 3.5W max.
and 20...300 VDC 6VA max.

Environment

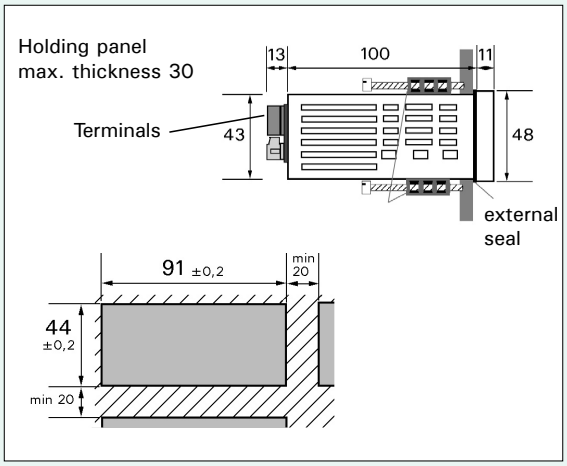
- IP65 front face protection.
- Operating temperature: -5 to 55°C.
- Storage temperature: -30°C to +80°C.
- Relative dampness: 80% annual average.
- Connection with plug-off screwed terminals (for 2.5 mm² cable, flexible or rigid).
- Case of black self-extinguishing UL 94 VO ABS.

Features

- Sampling time: 100ms or 20ms
- Rejection rate:
  Common mode: 130 dB Serial mode : 40 dB 50/60 Hz
- Zero drift compensation and self-calibration
- Isolation: input / power supply: 2.5 kV eff. 50Hz-1min
  input / output: 2.5 kV eff. 50Hz-1min

Dimensions

HOUSING: 96 x 48 x 124 mm (with terminals)



Mounting: on panel; cut out 44 x 91 mm

ARDETEM SFERE® 69510 SOUCIEU EN JARREST - Tél. : 33 (0)4 72 31 31 30 Fax. : 33 (0)4 72 31 31 31

Technical features

Input type

DIP530/DGN85S

3 DC current inputs

Bidirectionnal ±20mA.

- Accuracy: 0.05 % of the full scale at +25 °C.
- Input impedance: 5Ω
- Thermal drift < 150 ppm/°C.
- Measurable scale overstepping: -5% to +5%.
- Programmable scale factor.
- Enlarging effect.
- Function special linearisation on 20 points.
- Supply for 2-wire sensor 21 VDC (±10%) / 70 mA protected from short-circuits.

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Logic input

tor: 1 logic input not isolated from the measure inputs

- display hold,
- totaller 0 reset / integration stop and start
- 0 reset of the min. and max.

Types of options

option A1 or A3

Analog output: 2 types on choice (specify on order)

A1: Active current output 0/4-20mA
A3: Voltage output 0-10V

- Accuracy: 0.1 % in relation to the display (at +25°C)
- Residual ripple ≤ 0.2%
- Admissible load 0Ω < Lr < 600 Ω (current)
  Lr > 500 kΩ (voltage)
- Programmable scale ratio with enlarging effect on the instant or running total value
- Response time: 40 ms

option R

Relay output: 2 relays

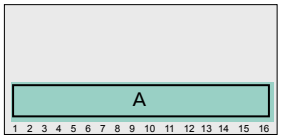
- NO-NC contact 8A - 250V on resistive load
- *Independently programmable*
- **Mode pulses**: duration 100, 200, or 400 ms; weight of the pulse adjustable from 1 to 10 000
- **Mode alarm**: setpoint or window on the instant or running total value
- Hysteresis adjustable in the display unit
- Time delay adjustable from 0 to 25 sec, in 0.1s increments

Coding

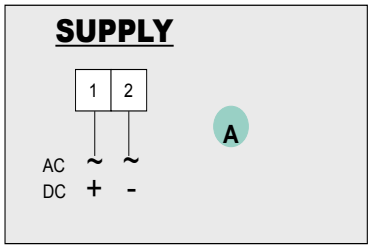
ARDETEM reference: DIP530
SFERE reference: DGN85S

- **Output options**:
  A : Analog (A1 or A3: specify)
  R : 2 relays

Wiring

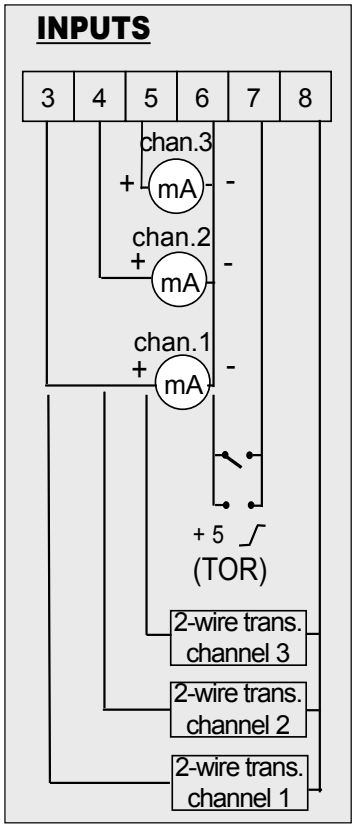


Location of the terminals
(view of case rear side)

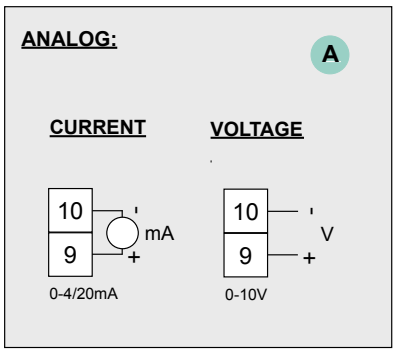


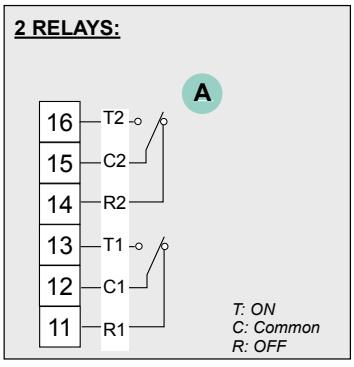
- **Standards**: Conform with stand. EN 50081-2 on rejections & EN 50082-2; immunity (industrial environment) EN 61000-4-2 level 3, EN 61000-4-3 level 3, EN 61000-4-4 level 4, EN 61000-4-6 level 3
- CE marking

This appliance is designed for industrial applications. It has to be installed in an electrical cabinet, or equivalent.



OUTPUTS (options)





ARDETEM SFERE

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your representative

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