8 CHANNEL DIFFERENTIAL DATA LOGGER

SL2100

8 ANALOG INPUTS -

3 PULSE COUNTERS -

ALARM OUTPUT -

signatrol

- 16 BIT RESOLUTION -
- STORES UP TO 112,000 VALUES -
 - PROGRAMMABLE INPUTS -

INTRODUCTION

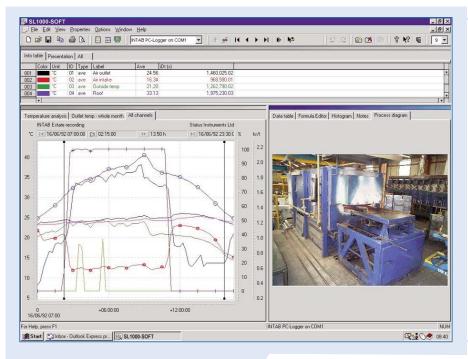
The SL2100 is a complete and versatile data logger with 8 analog inputs, 3 pulse counters, an alarm output and 220kB memory. This is more than enough for most measurement situations. As opposed to the SL1000, the SL2100 does not require add-ons. Its compact size makes it the ideal mobile instrument.

The logger can handle practically all sensors on the market thanks to the "software range switching". Each channel can be individually configured to one of the following ranges:. +/-50mV, 100mV, 1000mV, 10V or 0(4)-20mA. The resolution is at least +/-25.000 divisions which in the highest range (+/- 10V) gives a resolution of 0.4mV!



SOFTWARE

Instead of measuring off-line, saving the values in the logger memory, the values can be presented on-line on the computer screen with the analysis SL1000-Software. This software is tailor made for Intab loggers and has everything one would need. Import and export functions, formula editing generating graphs, and also lots of plug-ins such as Data table and Histogram.



TYPICAL EXAMPLE OF USING SL1000-SOFTWARE

(for more information see separate SL1000-software datasheet)

Signatrol.com Data Logging Solutions

ORDER CODE

SL2100 8 Channel Differential Logger
SL1000-SOFT SL1000 Series Software

SL2100 TECHNICAL SPECIFICATIONS

ANALOG DATA

Current range

Measuring methodSuccessive approximation, 15bits + signMeasurement intervalProgrammable in 1s steps up to 24h

All channels scanned within the same second.

INPUTS 8 true differential inputs
Impedance Min 400k Ohm between + and Min 5MOhm between + and GND

Max overvoltage 30V

Max overcurrent 80mA (at 20mA range) NOTE Current input shunts are at 510hm

Ranges Factory set or programmable

 Voltage ranges
 ±50mV

 ±100mV
 ±1000mV

±10V ±20mA

ThermocouplesB, E, J, K, N, R, S, T (50mV) **Dynamic range**B, E, J, K, N, R, S, T (50mV)

Min. 25000 divs on all ranges

 Resultant resolution
 10V - 0.4mV

 1000mV - 40uV

100mV - 4uV 50mV - 2uV 20mA - 0.8uA Thermo. T/C J - 0.1°C T/C K - 0.1°C T/C T - 0.1°C T/C S - 0.2°C T/C E - 0.1°C

ACCURACY (@ 23°C ±5°C) PPM + Divisions

Voltage ranges 10V: Max ± 100 ppm + 2div

10. Max ±100ppm + 2div 10. Max: ±200ppm + 2div 100mV: Max ±300ppm + 2div 50mV: Max ±400ppm + 2div

Current range 20mA: Max ±300ppm + 2div

Cold junction Max ± 0.5 °C

Temp. offset Max 50ppm of reading/ $^{\circ}$ C Noise Max ± 1 bit (=Division)

Common mode min ±5V at 10V range, min ±10V at all other ranges

Range Min $\pm 8V$ (10V - Range $\pm 5V$)

CMRR (dc) Min 80db

DIGITAL DATA

Standard Serial transfer (RS-232)

Protocol 8bit ASCII, 1 Start, 1 Stop, No parity

Baudrate 9600baud

Handshake DTR/CTS Hardware Storage Capacity 112 000 values

Data retention 10 years Lithium battery backup

Mechanical Details

Dimensions in mm

Length247mmHeight36mmWidth110mmWeight860g

Operating Temperature -20°C to +50°C

