

8 CHANNEL DIFFERENTIAL DATA LOGGER

SL2100

8 ANALOG INPUTS -

3 PULSE COUNTERS -

ALARM OUTPUT -

16 BIT RESOLUTION -

STORES UP TO 112,000 VALUES -

PROGRAMMABLE INPUTS -

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INTRODUCTION

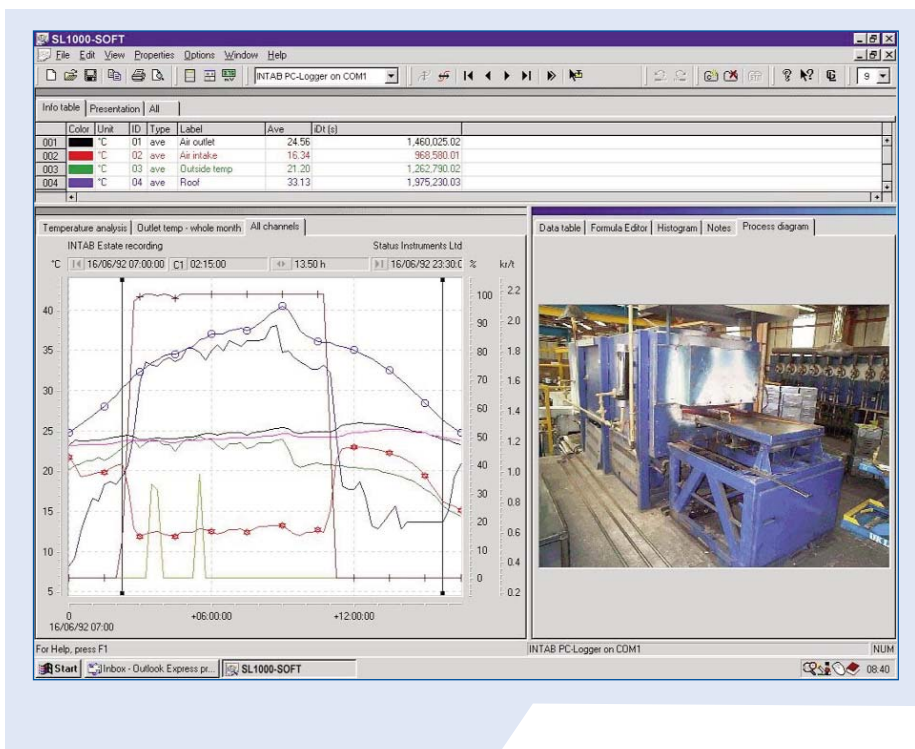
The SL2100 is a complete and versatile data logger with 8 analog inputs, 3 pulse counters, an alarm output and 220kB memory. This is more than enough for most measurement situations. As opposed to the SL1000, the SL2100 does not require add-ons. Its compact size makes it the ideal mobile instrument.

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: $\pm 50\text{mV}$, 100mV , 1000mV , 10V or $0(4)\text{-}20\text{mA}$. The resolution is at least ± 25.000 divisions which in the highest range ($\pm 10\text{V}$) 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

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SL2100 TECHNICAL SPECIFICATIONS

ANALOG DATA

Measuring method
Measurement interval

Successive approximation, 15bits + sign
Programmable in 1s steps up to 24h
All channels scanned within the same second.

INPUTS
Impedance

8 true differential inputs
Min 400k Ohm between + and -
Min 5MOhm between + and GND
30V

Max overvoltage
Max overcurrent
Ranges
Voltage ranges

80mA (at 20mA range) NOTE Current input shunts are at 510hm
Factory set or programmable
±50mV
±100mV
±1000mV
±10V

Current range
Thermocouples
Dynamic range
Resultant resolution

±20mA
B, E, J, K, N, R, S, T (50mV)
Min. 25000 divs on all ranges
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)
Voltage ranges

PPM + Divisions
10V: Max ±100ppm + 2div
1V: Max: ±200ppm + 2div
100mV: Max ±300ppm + 2div
50mV: Max ±400ppm + 2div
20mA: Max ±300ppm + 2div
Max ±0.5 °C

Current range
Cold junction
Temp. offset
Noise
Common mode
Range
CMRR

Max 50ppm of reading/°C
Max ±1bit (=Division)
min ±5V at 10V range, min ±10V at all other ranges
Min ±8V (10V - Range ±5V)
(dc) Min 80db

DIGITAL DATA

Standard
Protocol
Baudrate
Handshake
Storage Capacity
Data retention

Serial transfer (RS-232)
8bit ASCII, 1 Start, 1 Stop, No parity
9600baud
DTR/CTS Hardware
112 000 values
10 years Lithium battery backup

Mechanical Details

Dimensions in mm

Length	247mm
Height	36mm
Width	110mm
Weight	860g
Operating Temperature	-20 °C to +50 °C

