

The INSTRU 12530 is a portable, battery operated data acquisition and logging system offering 16 bits, high-resolution 8 channel data logger.

The INSTRU 12530 feature powerful graphical display and analysis functions for measuring voltage, current and temperature.

It is designed to provide a professional, compact, stand-alone low cost data logging system for a wide variety of applications.

CARACTERISTICAS

- Stand alone operation - sampling and displaying the measurements without connection to a computer
- Operates on a 7.2V rechargeable battery
- 8 input channels measures voltage and current, Pt100, thermocouples J, K and NTC
- 16 bit sampling resolution
- Rapid sampling - up to 10,000 samples per second on all inputs
- Large data storage of 256KB RAM
- Large graphical display showing collected data as measured values, graphs or tables
- Fast communication channels: RS232 and USB
- Ability to scale readings to a meaningful engineering units (e.g. bar, ppm)
- Built-in clock and calendar - keeps track of time and date for each data recording
- Multiple logging storing up to 100 sampling sessions
- On screen text editing adding more information to the collected data



ESPECIFICACIONES

Parameter	Range	Resolution	Accuracy	
0-20mA	0-20mA	0.4 μ A	$\pm 5\mu$ A	Loop impedance: 50
0-50mV	0-50mV	1 μ V	$\pm 0.5\%$ of reading	Input impedance: 200k
0-10V	0-10V	160 μ V	$\pm 0.5\%$ of reading	Input impedance: 200K
Temperature NTC	-25 – 110°C	0.03°C	$\pm 1\%$ of reading	NTC: 10K resistor
Temperature PT-100	-200 – 400°C	0.1°C (7m)	$\pm 0.5\%$ of reading	up to 8 PT-100 2 wire channels or 4 PT-100 3 wire Channels.
Temperature Thermocouple J	-300 – 1500°C	0.1°C (1 μ V)	$\pm 0.5\%$ of reading	Cold junction compensation error: $\pm 0.3^\circ$ C
Temperature thermocouple K	-250 – 1100°C	0.1°C (1 μ V)	$\pm 0.5\%$ of reading	Cold junction compensation error: $\pm 0.3^\circ$ C
Frequency (input 1 only)	0.3Hz – 20KHz	50 μ s		Sensitivity 20mV

Inputs	8 differential inputs
Display	Graphic LCD 64x128 pixels
Sampling Capacity	256KB
Analog sampling resolution	16 bits
Analog sampling rate	Variable, 1 sample/hour to 10,000 samples/sec
Power supply:	External 9V to 12V DC input Internal rechargeable 7.2V NiCa battery (Battery life: 50 hours between charges)
Operating Temperature Range	0 to 5°C
Dimensions	182x100x28 mm
Weight	450gr
Case	Plastic ABS box
Software	Windows 95/98/2000/ME/XP and NT
Communication	RS-232 at 19,200 BPS USB 1.1 compliant
General A to D specifications	Noise: 30 μ V rms • Internal linearity error: $\pm 0.08\%$ of FSR • Offset error: 0.1% • Zero crossing detector • Sensitivity: 20mV • Range: 0.3 Hz to 20,000 Hz • Resolution: 5 μ s

