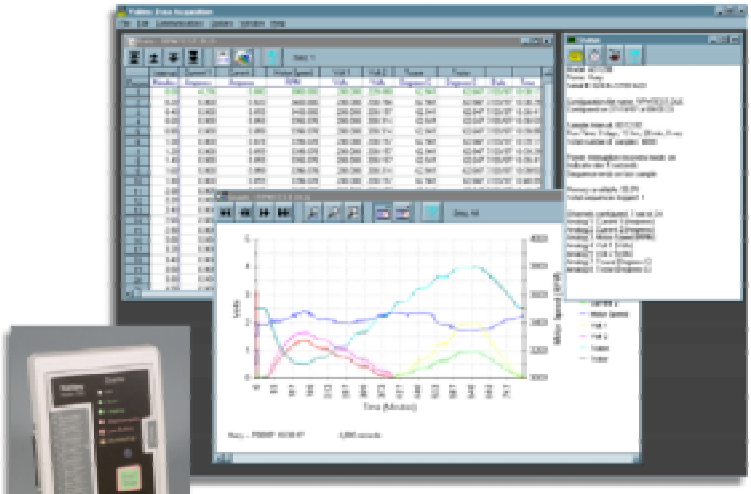
Valitec
Value In Technology

Model AD128

Stand-Alone Data Acquisition System



Configuration & Analysis Software

AD128 Logging Unit

Features

- **Lightweight, pocket-sized**
- **Stand-alone**
- **Fast, easy setup**
- **Event-based recording options**
- **10-year battery backup**
- **Runs on Windows 95, NT and 3.1**

Description

The AD128 is a complete stand-alone data acquisition system, including a pocket-sized logging unit, Configuration & Analysis Software and all accessories. This system provides a method for recording directly from industry-standard sensors, instruments and other circuits with output voltages in the range of 0 to 5 volts or 0 to 10 volts, and thermistor temperature probes.

The AD128 logging unit will operate from a 9 volt battery for up to 3 months while recording from all 8 analog and 16 digital inputs. Recording can be as slow as one reading every 99 minutes or as fast as 500 per second, sampling all inputs simultaneously. Optionally, recording may be triggered by a specified condition on the input signal levels, eliminating unwanted information.

Sample records are time-stamped with the time and date of the built-in real-time clock. The 10-year battery-backed data memory and software interlock ensure that data won't be lost or accidentally erased. All inputs are protected to +/- 20 volts.

The full-featured Configuration & Analysis Software V4.0 (C&A V4.0) is shipped with each system and enables immediate use of the system right out of the box. The form-based setup is extremely intuitive and requires no programming. Once data has been recorded, a single mouse click retrieves data into a built-in spreadsheet. Another mouse click generates a preformatted graph for immediate analysis. C&A Software runs on Windows 95, NT and 3.1.

Applications

Laboratory Data Acquisition
Materials Testing
Field Data Collection
Process Monitoring & Control
Quality Audit, Parts Measuring
Assembly & Calibration Fixturing

Order Information

Systems Include:

AD128 Logging Unit	9V Battery
C&A Software V4.0	AC Wall Adapter
9-pin PC Communication Cable	1 Year Warranty
25-pin Sensor Interface Cable	Free Software Upgrades

Product	Input Types	Order No.
5 Volt Analog/Digital	*8 analog, 0 to 5V* *16 discrete*	*AD128*
10 Volt Analog/Digital	8 analog, 0 to 10V 16 discrete	AD128-10
Temperature	*8 temperature* *8 discrete*	*AD128-T8*
5 Volt Analog/Digital with Temperature	6 analog, 0 to 5V 2 temperature, 14 discrete	AD128-T2
Temperature/Digital with 5 Volt Analog	*6 temperature, 10 discrete* *2 analog, 0 to 5V*	*AD128-T6*
10 Volt Analog/Digital with Temperature	6 analog, 0 to 10V 2 temperature, 14 discrete	AD128-10T2
Temperature/Digital with 10 Volt Analog	*6 temperature, 10 discrete* *2 analog, 0 to 10V*	*AD128-10T6*

Optional Accessories	Order No.
DB25 / Screw Term. Board (3.5"x2")	DB25TRM
6-ft. DB25 - DB25 cable (for use with DB25TRM)	CL25-6
Nema 12 Enclosure, stainless steel, hinged, quick-release, 6" x 8" x 4"	WE128
Thermistor Sensor/Lead, 30k, -10 to 150 °C	TP-301-XX**
Thermistor Sensor/Lead, 10k, -30 to 120 °C	TP-101-XX**

** XX = length in feet

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Specifications

Inputs

Analog		
Input Voltage Range		0 to 5 V (AD128-10: 0 to 10V)
Resolution		20mV (AD128-10: 40mV)
Absolute Accuracy		± 10mV (AD128-10: ±20mV)
Input Bias Current		400 nA
Discrete/Digital (up to 10V recommended, 100k pull-ups on 1 thru 8)		
"Going High" Threshold		3.5 V (Maximum)
"Going Low" Threshold		1.0 V (Minimum)
Input Bias Current		± 10 µA
Temperature		
Resolution	(TP-301)	0.4 °C @ 50 °C
	(TP-101)	0.4 °C @ 25 °C
Accuracy	(TP-301)	within ±1.0 °C, 40 to 120 °C
	(TP-101)	within ±1.0 °C, 10 to 90 °C
Full-Scale Range		-10 to 150 °C (TP-301)
(better than ±3 °C accuracy)		-30 to 120 °C (TP-101)
Max. Operating Temperature		250 °C
Connector Type		Standard DB 25-pin

Data Storage

Data Storage	130,000 samples
Recording Duration	0.002 seconds to years
Sampling Frequency	Fast as 500 Hz, Slow as 99 min. (all channels)
Data Memory Battery Life	10 years

Operating

Power Supply	
Voltage	7 to 12 volts (9V batt. / Adapt.)
Current	
Standby	300µA
Recording	4mA (only while sampling)
LED Indication (sampling)	10mA (can be disabled)
Battery Life	Up to 3 months, 9V Alkaline (Up to 6 months, lithium)
Power Adapter (included)	110V-9V 200mA AC adapter
Temperature	
Operating	-10 to 50 degrees Celsius
Storage	-20 to +70 degrees Celsius

Communication

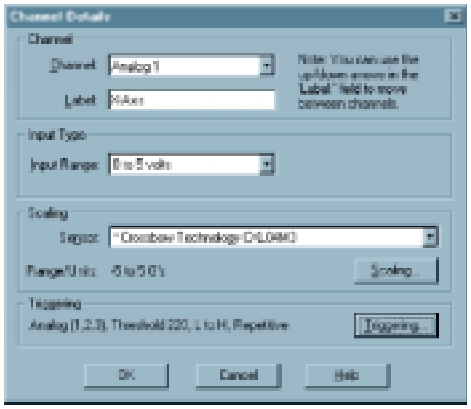
RS-232 Interface	
Baud Rate	9600 bps
Connection	9-pin female
Data Format	8 data, no parity, 1 stop bit

Dimensions

5.8" x 3.6" x 1.3"
(14.7cm x 9.14cm x 3.3cm)

Weight

8 oz. (226 g)



Scale and trigger setup includes pre-defined sensor profiles.

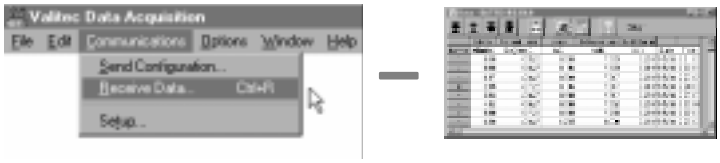
Operation

1 Configure (Setup)

Simple form-based configuration

2 Record Information

3 Retrieve Data

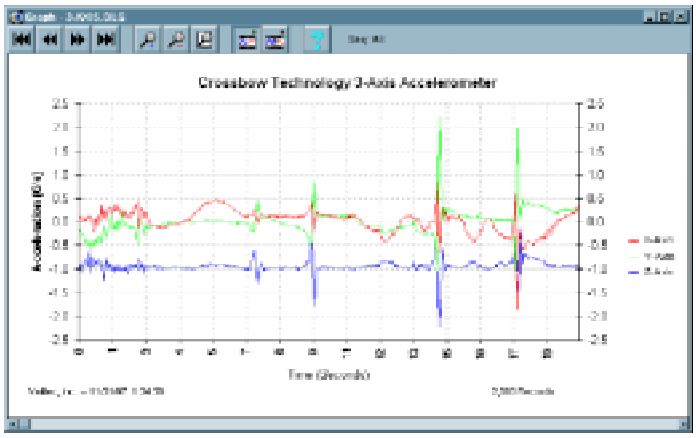


Built-in spreadsheet: Graph, Print, Export...

4 View Graph

For Analysis or Presentation: Copy/Paste, Print, Export...

Example Data Plot



Plotting features enable immediate analysis and presentation-quality graph creation. Complete with scroll, zoom, scale, anotate, 2D, 3D and other capabilities.