



 Cole-Parmer®

USB DATA ACQUISITION MODULES

ECONOMICAL & PRECISE
PC-BASED DAQ



Cole-Parmer® USB Data Acquisition Modules

DESCRIPTION

The Cole-Parmer line of economical USB data acquisition (DAQ) modules features multifunction I/O, digital I/O, and temperature measurement capabilities.

Plug 'n' play technology makes these units easy to set up and operate. External green LED confirms communication to your PC. Integrated screw terminals eliminate the need for external cable connections, while the rugged, compact design is perfect for harsh environments or for saving valuable bench space.

The modules use operator-friendly, out-of-box setups, or program your system for more complex functions using accompanying software—no optional accessories required.



APPLICATIONS

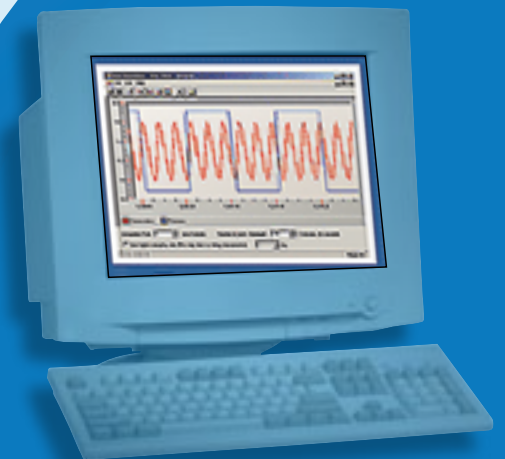
Cole-Parmer DAQ modules are ideal for monitoring temperature and process in manufacturing, quality control, testing, or research laboratory environments.



FEATURES

- Ease of operation is facilitated by plug 'n' play functionality
- Compatible with USB 1.1 and USB 2.0
- Monitor multiple processes from one terminal
- "Trigger" capabilities allow for event programming
- "Counter" functionality allows units to read up to a 1 MHz signal
- Desktop applications can be transferred to laptops for field measurements
- Supports all common sensor types used in any simultaneous combination
- Temperature and thermocouple input modules perform all linearization and cold-junction compensation

**Accurate and instant
data for peace of mind**



SOFTWARE SUITE

Software is included with all units. The suite consists of four software programs supported by SoftWIRE®, DASyLab®, and LabVIEW®, and is compatible with Windows® 98SE/ME/2000/XP operating systems.

CALIBRATION

InstaCal™ is an installation, test, and calibration application software that detects new hardware and configures your computer for accurate measurements. Set and store special features and configurations based on your application requirements.

STRIP-CHART DATALOGGING

TracerDAQ™ software provides strip-chart, datalogging, and oscilloscope capabilities. Select channels to display, input ranges, sampling rates, and click "run". Data is logged as a text or an Excel file, allowing you to save graphical displays as bitmaps. Free source code available.

PROGRAMMING LIBRARIES

Universal Library® is a powerful language interface which allows users to write programs in all of the popular programming languages using easy-to-understand, high-level command syntax. Software is built upon individual functions; each of which programs, triggers, reads from, or writes to the board's I/O components. This simplifies configurations and operation of all hardware with a single universal set of functions. Drivers for most popular DAQ packages included.

Universal Library for LabVIEW provides LabVIEW drivers for hardware and a powerful set of VIs and programming examples for LabVIEW version 6.0 or later.

INSTALLATION

- Unpack
- Install InstaCaL and TracerDAQ software (includes drivers and test application)
- Plug device into USB port (device will autodetect)
- Run InstaCal to configure and test



For further information,
go to ColeParmer.com/DAQ .

In the U.S.

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In the United Kingdom

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International customers

Call 847-549-7600 to reach our International Sales Department or contact your local dealer.



**FREE TECHNICAL
APPLICATIONS ASSISTANCE!**

PERFORMANCE SPECIFICATIONS

- Powered by the 5 V USB supply from your computer; fully compatible with USB 1.1 and USB 2.0
- Supported by Windows® 98SE/ME/2000/XP operating systems



Operating temperature range:

32 to 158°F (0 to 70°C)

Dimensions:

Models 18200-00, -10, -20: 3"W x 1"H x 3¼"D
Models 18200-30, -40: 3¼"W x 1½"H x 5"D

Catalog number		ML-18200-00	ML-18200-10	ML-18200-20	ML-18200-30	ML-18200-40	
Analog input	Number of channels	Single-ended	8	8	8	—	
		Differential	4	4	0	8 Tin	8 Tin
	Sample rate (kS/s)	Single channel (max)	1.2	50	50	2 S/s per channel	2 S/sec total
		Board (max)	8	50	100	16 S/s per channel	16 S/sec total
Input range		Diff mode: ±1 V, ±1.25 V, ±2 V, ±2.5 V, ±4 V, ±5 V, ±10 V, ±20 V		±1 V, ±2 V, ±5 V, ±10 V	±0.080 V (thermocouple: J, K, T, E, R, S, N, or B), RTD 0 to 0.5 V, Thermistor 0 to 2 V, Semiconductor sensor 0 to 2.5 V	±0.080 V (thermocouple: J, K, T, E, R, S, N, or B)	
Analog output	Number of channels		2	2	0	—	—
	Resolution (bits)		10	12	0	—	—
	Counter/timers	Counters	1	1	1	—	—
		Depth (bits)	32	32	32	—	—
	Digital I/O, DIO bits (bi-directional)		16	16	8	8	8

What's included:

Software suite CD and 6-ft USB cable.