

# LOW COST DATA ACQUISITION



## COMPLETE SELECTION



### SIGNAL TYPE

ANALOG • DIGITAL • TEMPERATURE • MULTIFUNCTION...*and more*



### INTERFACE

USB • WIRELESS • ETHERNET • PCI • PC/104 ... *and other popular bus types*



### TEST & MEASUREMENT SOFTWARE

CONFIGURE IT • WIRE IT • WRITE IT... *the choice is yours*



THE LEADER IN  
LOW-COST  
PC-BASED DATA  
ACQUISITION  
HARDWARE AND  
SOFTWARE

WIRELESS  
ETHERNET

USB

PCI

DATA LOGGERS

PCMCIA

PC/104

ISA

EXTERNAL SIGNAL  
CONDITIONING

TEST AND  
MEASUREMENT  
SOFTWARE



**About Us**

Based in Norton, Massachusetts, Measurement Computing is a global data acquisition provider, offering a complete selection of low-cost, PC-based hardware and software for every skill set.

**30-Day Money-Back Guarantee**

Products may be returned within 30 days of purchase for a full refund.

**Live Support**

Our technical sales support engineers are experts in both hardware and software. They'll help you select the best products for your application, and help you get your application up and running quickly.

# INTRODUCING WEB-ENABLED TEMPERATURE MEASUREMENT

# Instant Access WORLDWIDE



## WEB-TEMP & WEB-TC

BUILT-IN  
WEB  
SERVER

*8-channel temperature  
measurement modules  
with built-in Web server*



MORE  
INFO

[www.mccdaq.com/webtemp](http://www.mccdaq.com/webtemp)

## TEST & MEASUREMENT SOFTWARE

Call us at **508 946-5100**

TO FIT EVERY SKILL SET, TIME CONSTRAINT, AND BUDGET

### DO YOU WANT TO WRITE YOUR OWN CODE?

*Solutions for the  
programmer and  
non-programmer  
alike, including  
drivers for:*

- DASYLab**
- LabVIEW**
- Measurement Studio—MCC Edition**
- OEMs/Custom**

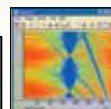
**NO**

**"Out of the box" graphical environments**



**TracerDAQ PRO** Strip Chart, Oscilloscope, Function Generator, and Rate Generator support a myriad of test and measurement applications

**DASYLab** Powerful, intuitive, graphical DAQ development application for non-programmers



**YES**

**I/O text-based programming**



**Universal Library**  
Windows programming libraries and components

**Measurement Studio—Measurement Computing Edition** Visual Studio 2005/2003 components and controls optimized for test, measurement, analysis, and presentation



# DATA/TEMPERATURE LOGGERS

Buy online at [www.mccdaq.com](http://www.mccdaq.com)

## CONFIGURE EASILY THROUGH USB PORT

### USB-500 SERIES

*Low-cost remote loggers*

- ▶ Easy to use—no training required
- ▶ USB interface for set-up and data download
- ▶ User-programmable alarm thresholds
- ▶ Red, green, and amber LED status indicators
- ▶ All software included to install, configure, and download data
- ▶ Software includes powerful strip chart and export to Excel®
- ▶ Replaceable, long-life lithium battery
- ▶ 1-year warranty

#### USB-501-LT

Single-channel temperature logger

- ▶ -10 to +50 °C range
- ▶ 15 m, 30 m, 1 hr, 2 hr sampling intervals
- ▶ Stores 4,080 measurements



**\$49**

#### USB-501

Single-channel USB temperature logger

- ▶ Stores 16,382 temperature measurements
- ▶ -35 to +80 °C range (+/- 1 °C accuracy)
- ▶ Protected against moisture to IP67 standard when cap is installed



**\$59**

#### USB-502

Temperature and humidity logger

- ▶ -35 to +80 °C temperature range (+/- 1 °C accuracy)
- ▶ 0 to 100% relative humidity range
- ▶ Stores 16,382 temperature and 16,382 relative humidity measurements
- ▶ Protected against moisture to IP67 standard when cap is installed



**\$79**

#### USB-503

0–30 VDC voltage data logger

- ▶ 0 to 30 VDC measurement range (+/- 1% typ. accuracy)
- ▶ Logging rate intervals between 10 sec and 12 hr
- ▶ Stores up to 32,510 measurements
- ▶ Connection via two screw terminals
- ▶ Probes included



**\$69**

#### USB-504

4–20 mA current loop data logger

- ▶ 4–20 mA DC current loop measurement range (+/- 1% typ. accuracy)
- ▶ Logging rate intervals between 10 sec and 12 hr
- ▶ Stores 32,000 measurements
- ▶ Connection via two screw terminals
- ▶ Probes included



**\$69**

**MORE INFO**

[www.mccdaq.com/loggers](http://www.mccdaq.com/loggers)

# COUNTER/TIMERS

## USB AND PCI

Call us at **508 946-5100**



**“IT’S ALL IN THE BOX!”**

*Low-cost 9513-based USB counter/timers replace expensive instrumentation*

The USB-4301 is a 5-channel, 16-bit counter/timer with 8 digital inputs, and 8 digital outputs. The USB-4303 version offers 10 channels. Both are software-programmable for event counting, pulse and frequency measurement and generation, alarm comparisons, and other input functions, eliminating the need for costly instrumentation.

#### USB-4301

Low-cost, 9513-based, 5-channel counter/timer

- ▶ 5-channel, 16-bit counter/timer
- ▶ Event counting, PWM, frequency measurement/division, duty cycle generation, and more
- ▶ Input frequencies up to 20 MHz
- ▶ 8 digital inputs, 8 digital outputs

**\$249**

#### USB-4303

Low-cost, 9513-based, 10-channel counter/timer

**\$349**

**ADD 5 MORE CHANNELS FOR \$100**

#### ALSO AVAILABLE

37-pin “D” connector versions.....[USB-4302/4304](#)  
PCI-bus version, 5 channels.....[PCI-CTR05](#)  
PCI-bus version, 10 channels.....[PCI-CTR10](#)  
PCI-bus version, 20 channels.....[PCI-CTR20HD](#)

**MORE INFO**

[www.mccdaq.com/ctr](http://www.mccdaq.com/ctr)

# TEMPERATURE MEASUREMENT

Buy online at [www.mccdaq.com](http://www.mccdaq.com)

## FOR ALL POPULAR BUS TYPES

### USB, ETHERNET, AND WIRELESS TEMPERATURE MEASUREMENT

*Versatility plus outstanding "price per channel"*

- Easy to use—no training required
- Superior performance—accuracy exceeds sensor output
- 8 digital I/O bits
- Software includes powerful strip chart and export to Excel®

#### ETHERNET

### WEB-TEMP & WEB-TC

8-channel, Web-enabled temperature measurement modules

- ▶ WEB-TEMP supports J, K, R, S, T, N, E, & B type thermocouples, 2-, 3-, or 4-wire RTDs and thermistors, and semiconductor temperature devices
- ▶ WEB-TC supports thermocouples only
- ▶ Built-in ambient CJC temperature sensor
- ▶ Independent temperature inputs
- ▶ Built-in Web server/Web page

**\$699/\$599**



BUILT-IN WEB SERVER

#### WIRELESS

### WLS-TEMP & WLS-TC

Wireless temperature modules

- ▶ WLS-TEMP supports J, K, R, S, T, N, E, & B type thermocouples, 2-, 3-, or 4-wire RTDs and thermistors, and semiconductor temperature devices
- ▶ WLS-TC supports thermocouples only
- ▶ 802.15.4 wireless protocol
- ▶ Range: up to 150 feet indoors, 2400 feet outdoors

**WLS-TEMP**  
**\$799** COMPLETE SYSTEM PRICE  
Includes **WLS-TEMP** and **WLS-IFC**

**WLS-TC**  
**\$599** COMPLETE SYSTEM PRICE  
Includes **WLS-TC** and **WLS-IFC**

**WLS-IFC**  
USB-to-wireless interface module

**\$149**  
If purchased separately



#### USB

### USB-TEMP & USB-TC

USB-based 8-channel temperature measurement modules

- ▶ USB-TEMP supports J, K, R, S, T, N, E, & B type thermocouples, 2-, 3-, or 4-wire RTDs and thermistors, and semiconductor temperature devices
- ▶ USB-TC supports thermocouples only
- ▶ Built-in ambient CJC temperature sensor
- ▶ Independent temperature inputs

**\$499/\$299**

### USB-TEMP-AI & USB-TC-AI

USB-based temperature and voltage measurement modules with 8 analog input channels

- ▶ 4 differential temperature inputs
- ▶ USB-TEMP-AI supports J, K, R, S, T, N, E, & B type thermocouples, 2-, 3-, or 4-wire RTDs and thermistors, and semiconductor temperature devices
- ▶ USB-TC-AI supports thermocouples only
- ▶ 4 differential or single-ended voltage inputs
- ▶ Voltage ranges:  $\pm 10$  V,  $\pm 5$  V,  $\pm 2.5$  V,  $\pm 1.25$  V
- ▶ Automatic linearization of data
- ▶ Open thermocouple detection

**\$649/\$549**



#### ALSO AVAILABLE

- 8 channel thermocouple input temperature logger; writes to Compact Flash card... [USB-5201](#)
- 8 channel temperature logger; writes to Compact Flash card ..... [USB-5203](#)

TEMPERATURE MEASUREMENT DEVICES ALSO AVAILABLE IN PCI, ISA, SERIAL I/O, AND REMOTE DATA LOGGER FORMATS

**MORE INFO** [www.mccdaq.com/temp](http://www.mccdaq.com/temp)

# HIGH PERFORMANCE MULTIFUNCTION

Call us at **508 946-5100**

## DATA ACQUISITION

### NEW MULTIFUNCTION USB DATA ACQUISITION PRODUCTS

*Two new lines of high-performance, multifunction USB modules introduce new levels of power and flexibility to the test and measurement environment—bringing advanced synchronous and simultaneous capacity to data acquisition and control, with outstanding speed and accuracy.*



#### USB-1616HS

**1-MHz, 16-channel, 16-bit, USB-based multifunction module**

- ▶ 16 single-ended or 8 differential analog inputs
- ▶ 7 programmable input ranges
- ▶ Analog inputs can measure voltage or thermocouple temperatures
- ▶ 24 channels high speed (>4 MHz) digital I/O
- ▶ 4 counter inputs capable of measuring frequency, period, pulse width, or quadrature encoders up to 20 MHz
- ▶ Synchronous I/O—analogue, digital, and counter/timer
- ▶ Optional expansion module quadruples analog inputs—for only **\$599**

**\$1399**



#### USB-1608HS

**Simultaneous 8-channel, 16-bit, USB-based multifunction module**

- ▶ Eight differential or single-ended analog inputs
- ▶ True simultaneous sampling (1 A/D converter per input)
- ▶ 250 kS/s per channel (2 MS/s aggregate)
- ▶ 32-bit event counter
- ▶ Analog/digital trigger inputs
- ▶ 16 digital I/O bits—LED status indicators

**\$1199**

#### ALSO AVAILABLE

**USB-1616HS-2 \$1499** Adds two analog outputs  
**USB-1616HS-4 \$1599** Adds four analog outputs

#### ALSO AVAILABLE

**USB-1608HS-2AO \$1399** Adds two analog outputs



**STARTING AT \$549**

### MULTIFUNCTION AND HIGH PERFORMANCE FOR THE OEM, TOO!

*Original Equipment Manufacturers—Use our USB- and PCI-2500 series boards to build synchronous and simultaneous analog, digital, and counter/timer I/O into your own products and systems, and save money.*

Product	Analog Inputs	Input Ranges	Digital I/O	Analog Outputs	Counters (32-bit)	Timers (16-bit)	Price
<a href="#">PCI-2511</a>	16SE	1	24	-	4	2	\$549
<a href="#">PCI-2513</a>	16SE/8DI	7	24	-	4	2	\$649
<a href="#">PCI-2515</a>	16SE/8DI	7	24	2	4	2	\$749
<a href="#">PCI-2517</a>	16SE/8DI	7	24	4	4	2	\$849
<a href="#">USB-2523</a>	16SE/8DI	7	24	-	4	2	\$799
<a href="#">USB-2527</a>	16SE/8DI	7	24	4	4	2	\$999
<a href="#">USB-2533</a>	64SE/32DI	7	24	-	4	2	\$999
<a href="#">USB-2537</a>	64SE/32DI	7	24	4	4	2	\$1199

**MORE INFO**

[www.mccdaq.com/2500](http://www.mccdaq.com/2500)

# TEST & MEASUREMENT SOFTWARE

Buy online at [www.mccdaq.com](http://www.mccdaq.com)

FOR EVERY SKILL SET...now Windows Vista compatible

## FLEXIBILITY FOR THE FUTURE

*The applications you develop today will move seamlessly to the next bus type of tomorrow*

### DASYLab®

Data Acquisition System Laboratory

Intuitive graphical development  
DAQ environment

#### OVER 90 DATA ACQUISITION, CONTROL, PROCESSING, AND DISPLAY FUNCTIONS

DASYLab is a graphical application that allows you to quickly develop custom DAQ applications without any programming. Using the intuitive worksheet, modules, and wire functions, you're only a few mouse clicks away from a complete application. DASYLab offers extensive function libraries in the following categories/modules:

<b>Inputs/Outputs</b>	<b>Signal Processing</b>	<b>Trigger</b>
<b>Display</b>	<b>Files</b>	<b>Data Reduction</b>
<b>Mathematics</b>	<b>Statistics</b>	<b>Network</b>



DASYLab.....Starting at **\$499** **MORE INFO** [www.mccdaq.com/dasylab](http://www.mccdaq.com/dasylab)



### TRACER DAQ® PRO

Data  
acquisition  
logger and  
instrument  
software  
suite



#### INCLUDES 4 VIRTUAL INSTRUMENTS STRIP CHART • FUNCTION GENERATOR • OSCILLOSCOPE • RATE GENERATOR

With TracerDAQ® PRO, a powerful, out-of-the-box virtual instrument suite, you can acquire, analyze and display data, and generate signals, within seconds of installing your Measurement Computing hardware. No programming is required.

#### 32-CHANNEL STRIP CHART



Sampling speeds equal to board's sampling rate; 8 graphs; alarms, triggering, more

#### 16-CHANNEL FUNCTION GENERATOR



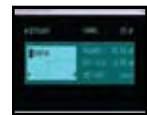
Multiple waveform types; ability to change duty cycle, phase, rate multiplier, gate ratio, more

#### 4-CHANNEL OSCILLOSCOPE



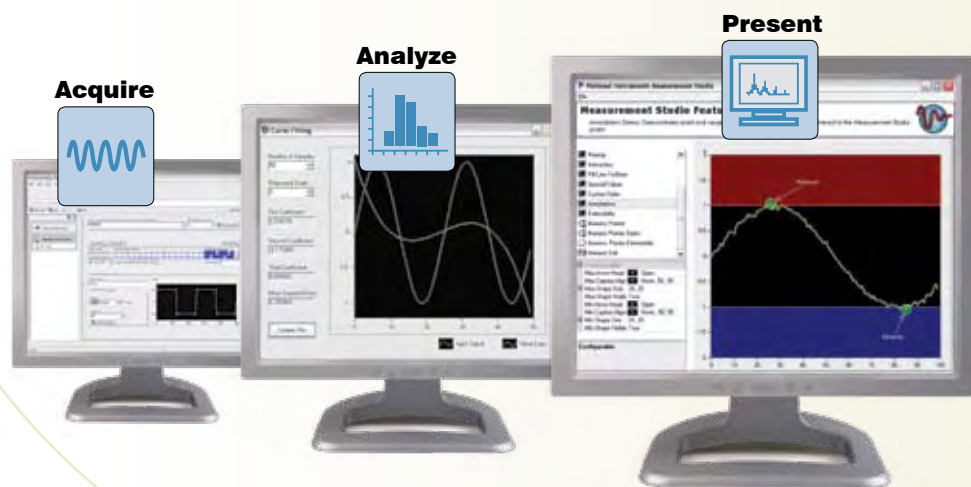
Sampling speeds equal to board's sampling rate, math functions, measurement display windows

#### 20-CHANNEL RATE GENERATOR



Vary frequency, duty cycle, and initial state of counter/timer outputs

TracerDAQ® PRO..... **\$199** **MORE INFO** [www.mccdaq.com/tdpro](http://www.mccdaq.com/tdpro)



*A powerful integration of MCC DAQ hardware with analysis and presentation tools for the scientist and engineer*

- Analog I/O
- Digital I/O
- Temperature
- Counter/Timer
- GPIB
- Digital signal processing
- Windowing
- Filtering
- Array and numeric calculations
- Signal generation
- Statistics
- Curve fitting
- Spectral analysis
- Graphs
- Dials
- Gauges
- Buttons
- Tanks
- Thermometers
- Slides
- Knobs

### Measurement Studio— MCC Edition

Integrated suite of classes and controls optimized for test, measurement, and automation applications in Visual Studio 2005 and Visual Studio .NET 2003

Measurement Studio dramatically reduces application development time with .NET controls, object-oriented measurement hardware interfaces, advanced analysis libraries, scientific user interface controls, measurement data networking, wizards, interactive code designers, and highly extensible classes.

With Measurement Studio, you use your Visual Studio programming knowledge to get measurements started quickly and create a complete measurement solution—all the way from acquiring, to analyzing, to presenting.

**\$999**

**MORE INFO** [www.mccdaq.com/mstudio](http://www.mccdaq.com/mstudio)