DATA ACQUISITION CATALOG

## Creating Modern DAQ for the Internet of Things

DAQ HATs Data Acquisition for Raspberry Pi®

MCC DAQ HATs (Hardware Attached on Top) are designed for use with Raspberry Pi, the most popular single-board computer on the market today. Bring professional quality measurement and I/O capability to this low-cost platform.

MODEL	MCC 118	MCC 152
Analog In	8	—
Analog Out	—	2
Sample Rate	100 kS/s	—
Resolution	12-Bit	12-Bit
Digital I/O	—	8

Perfect for:
- Embedded system design
- Industrial IoT
- End-of-line test
- Remote monitoring
- Edge Computing
- Validation/verification test
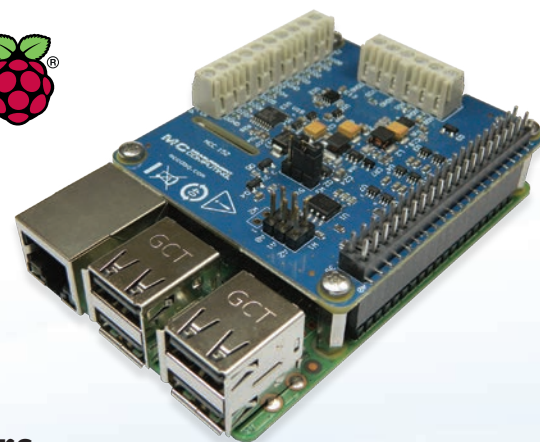
WebDAQ Internet Enabled Data Loggers

In an age of mobile applications and connected devices, the ability to access your data remotely is more important than ever. WebDAQ offers a new data logger architecture that allows configuration and access to the data from anywhere in the world.

MODEL	WebDAQ 316	WebDAQ 504
Inputs	16 Thermocouple	4 IEPE
Sample Rate	75 S/s Max	51 kS/s/Ch Max
Resolution	24-Bit	24-Bit
Digital I/O	4	4
Memory	Unlimited	Unlimited

OUR PRODUCT LINES

MC MEASUREMENT COMPUTING™

High quality Data Acquisition, and Data Loggers that are easy-to-use, easy-to-integrate and easy-to-support.

DATA TRANSLATION®

Advanced DAQ devices specializing in dynamic signal analyzers and isolated data acquisition.

Data Acquisition and Control

2

Measurement Computing provides data acquisition solutions for a wide range of applications and interfaces. MCC offers high-quality hardware, software, and drivers for a quick and customizable solution to your unique application.

16-BIT MULTIFUNCTION

USB-230 Series

Analog Inputs	8 SE/4 DIFF
Resolution	16-bit
Sample Rate	Up to 100 kS/s
Simultaneous	—
Isolated	—
Analog Outputs	2
Digital I/O	8
Counters	1 x 32-bit

- Software support for Windows

HIGH-PRECISION

USB-1808 Series

Analog Inputs	8 SE/8 DIFF
Resolution	18-bit
Sample Rate	Up to 200 kS/s/Ch
Simultaneous	✓
Isolated	—
Analog Outputs	2
Digital I/O	4
Counters	2 x 32-bit[†]

- Software support for Windows and Linux
- [†] 2 quadrature encoder inputs

ETHERNET MULTIFUNCTION

E-1608

Analog Inputs	8 SE/4 DIFF
Resolution	16-bit
Sample Rate	250 kS/s
Simultaneous	—
Isolated	—
Analog Outputs	2
Digital I/O	8
Counters	1 x 32-bit

- Software support for Windows, Linux and Android

HIGH-SPEED SIMULTANEOUS

DT9832 Series

Analog Inputs	2 or 4 SE
Resolution	16-bit
Sample Rate	Up to 2 MS/s/Ch
Simultaneous	✓
Isolated	✓
Analog Outputs	Up to 2
Digital I/O	32
Counters	5 x 32-bit[†]

- Software support for Windows
- [†] 3 quadrature encoder inputs

HIGH-SPEED MULTIFUNCTION

USB-1608G Series

Analog Inputs	16 SE/8 DIFF
Resolution	16-bit
Sample Rate	Up to 500 kS/s
Simultaneous	—
Isolated	—
Analog Outputs	Up to 2
Digital I/O	8
Counters	2 x 32-bit

- Software support for Windows, Linux and Android

ISOLATED SIMULTANEOUS

DT8824/DT9824 (Ethernet, USB)

Analog Inputs	4 DIFF[†]
Resolution	24-bit
Sample Rate	4800 S/s/Ch
Simultaneous	✓
Isolated	✓
Analog Outputs	—
Digital I/O	Up to 16
Counters	—

- Software support for Windows
- [†] ±500 V Isolated channel-to-channel

BRIDGE-BASED SENSORS

DT9838

Analog Inputs	4 DIFF
Bridge Inputs	✓
Programmable Excitation	✓
Voltage Inputs	±250 mV
Resolution	24-bit
Sample Rate	52.7 kS/s/Ch
Simultaneous	✓
Digital I/O	1 Tachometer
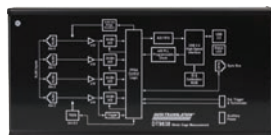
- Software support for Windows

MULTI SENSOR

DT9829-8

Analog Inputs	8 DIFF
Bridge Inputs	✓
Thermocouple, Resistance, Current	✓
Voltage Inputs	✓
Resolution	24-bit
Sample Rate	960 S/s
Simultaneous	—
Digital I/O	8
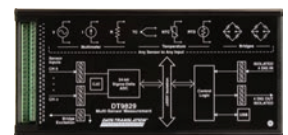
- Software support for Windows

Data Acquisition and Control

Measurement Computing provides data acquisition solutions for a wide range of applications and interfaces. MCC offers high-quality hardware, software, and drivers for a quick and customizable solution to your unique application.

DEVICE	Bus Type	Analog Inputs	Sample Rate	Resolution	Digital I/O	Counters	Analog Outputs
LOW COST							
USB-200 Series	USB	8 SE	500 kS/s	12-bit	8	1	Up to 2
USB-230 Series	USB	8 SE/4 DIFF	100 kS/s	16-bit	8	1	2
MCC 118	Rpi	8	100 kS/s	12-bit	—	—	—
MCC 152	Rpi	—	—	12-bit	8	—	2
BTH-1208LS	Bluetooth	8 SE/4 DIFF	1 kS/s	12-bit	8	1	2
USB-1208LS	USB	8 SE/4 DIFF	1.2 kS/s	12-bit	16	1	2
USB-1208FS-Plus	USB	8 SE/4 DIFF	50 kS/s	12-bit	16	1	2
E-1608	Ethernet	8 SE/4 DIFF	250 kS/s	16-bit	8	1	2
USB-1608G Series	USB	16 SE/8 DIFF	500 kS/s	16-bit	8	2	Up to 2
DT9812/13/14 Series	USB	Up to 24 SE	Up to 100 kS/s	12-bit	Up to 16	1	2
SIMULTANEOUS							
USB-1808	USB	8 SE/8 DIFF	50 kS/s/ch	18-bit	4	2*	2
USB-1808X	USB	8 SE/8 DIFF	200 kS/s/ch	18-bit	4	2*	2
USB-1608FS-Plus	USB	8 SE	100 kS/s/ch	16-bit	8	1	—
DT9816 Series	USB	6 SE	Up to 750 kS/s/ch	16-bit	16	1	—
DT9832 BNC Series	USB	2 or 4 SE	2 MS/s/ch	16-bit	32	5*	Up to 2
DT9836 BNC Series	USB	6 or 12 SE	225 kS/s/ch	16-bit	32	5*	Up to 4
DT9826	USB	16 SE	41.6 kS/s/ch	24-bit	16	2	—
HIGH SPEED							
USB-1208HS	USB	8 SE/4 DIFF	1 MS/s	13-bit	16	2	—
USB-2600 Series	USB	16 or 64 SE	1 MS/s	16-bit	24	4	Up to 4
USB-1616HS Series	USB	16 SE/8 DIFF	1 MS/s	16-bit	24	4	Up to 4
DT9834-16-4-16-BNC	USB	16 SE/8 DIFF	500 kS/s	16-bit	32	5	4
DT9862 Series	USB	2 SE	10 MS/s/ch	16-bit	32	5*	Up to 2
USB-2020	USB	2 SE	20 MS/s/ch	12-bit	8	—	—
HIGH PRECISION							
USB-2404 Series	USB	4 DIFF	Up to 50 kS/s/ch	24-bit	—	—	—
DT8824	Ethernet	4 DIFF	4.8 kS/s/ch	24-bit	4	—	—
DT9824	USB	4 DIFF	4.8 kS/s/ch	24-bit	16	—	—
DT9844	USB	32 SE/16 DIFF	1 MS/s	20-bit	32	5	—
DIGITAL I/O							
USB-1024LS	USB	—	—	—	24	1	—
USB-DIO32HS	USB	—	—	—	32**	—	—
USB-DIO96H Series	USB	—	—	—	96	1	—
E-DIO24	Ethernet	—	—	—	24	1	—
DT9810	USB	8 SE	25 kS/s	10-bit	20	1	—
COUNTER/TIMER							
USB-CTR Series	USB	—	—	—	8**	4 or 8**	—
ANALOG OUTPUT							
USB-3100 Series	USB	—	—	—	8	1	Up to 16
USB-3101FS	USB	—	—	—	—	—	4
MIXED/UNIVERSAL INPUT***							
USB-2404-UI	USB	4 DIFF	100 S/s/ch	24-bit	—	—	—
SC-1608-USB	USB	8 DIFF	250 kS/s	16-bit	8	2	—
SC-1608X-2AO-USB	USB	8 DIFF	500 kS/s	16-bit	8	2	2
SC-1608-2AO-ENET	Ethernet	8 DIFF	250 kS/s	16-bit	8	1	2
DT9829-8	USB	8 DIFF	960 S/s	24-bit	4	—	—
DT9838	USB	4 DIFF	52.7 kS/s/ch	24-bit	—	—	—

*   Capable of measuring quadrature encoders
**   High-speed scanning up to 8 MS/s
*** Most devices capable of measuring strain, pressure, temperature, current, resistance, and voltage.
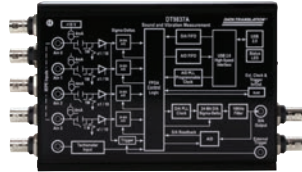
Sound and Vibration

Directly measure IEPE-type accelerometers or voltage inputs with no added signal conditioning using USB and Ethernet data acquisition (DAQ) devices.

4

PORTABLE USB

DT9837 Series

Analog Inputs	4 SE[†]
Resolution	24-bit
Sample Rate	Up to 105.4 kS/s/Ch
Simultaneous	✓
Isolated	—
Analog Outputs	Up to 1
Digital I/O	—
Tachometer	Up to 1

† Direct IEPE inputs, sync port for channel expansion

STAND ALONE

WebDAQ 504

Analog Inputs	4[†]
Resolution	24-bit
Sample Rate	51 kS/s/Ch
Simultaneous	✓
Isolated	—
Analog Outputs	—
Digital I/O	4
Tachometer	—

† Direct IEPE inputs

MEDIUM-CHANNEL COUNT USB

DT9857E Series

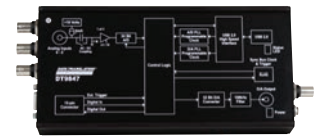| Analog Inputs	8 or 16 SE[†]
Resolution	24-bit
Sample Rate	105.4 kS/s/Ch
Simultaneous	✓
Isolated	—
Analog Outputs	2
Digital I/O	16
Tachometer	1

† Direct IEPE inputs, sync port for channel expansion

WIDE BANDWIDTH USB

DT9847 Series

Analog Inputs	Up to 3 SE[†]
Resolution	24-bit
Sample Rate	216 kS/s/Ch
Simultaneous	✓
Isolated	—
Analog Outputs	Up to 2
Digital I/O	8
Tachometer	—

† Direct IEPE inputs, sync port for channel expansion

4-CHANNEL ETHERNET

DT8837

Analog Inputs	4 IEPE
Resolution	24-bit
Sample Rate	52.7 kS/s/Ch
Simultaneous	✓
Analog Outputs	1
Digital I/O	4
Tachometer	1

HIGH-CHANNEL COUNT USB

VIBbox

Analog Inputs	Up to 64[†]
Resolution	24-bit
Sample Rate	105.4 kS/s/Ch
Simultaneous	✓
Isolated	—
Analog Outputs	Up to 8
Digital I/O	Up to 64
Tachometer	Up to 4

† Direct IEPE inputs, sync port for channel expansion

QUICKDAQ VIBRATION SOFTWARE
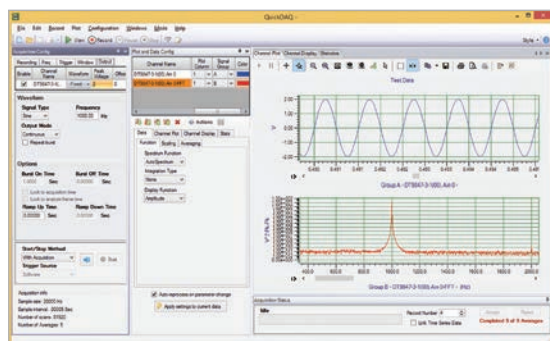
- Two extensions add FFT analysis capabilities to the free base package

- QuickDAQ FFT Analysis Options allow serious sound & vibration analysis supporting modal analysis and ODS analysis methods

- Single-Channel and Dual-Channel (frequency response) FFT operations

- Switch between the Data Logger time-based interface and the FFT Analyzer block/average-based interface

Temperature Measurement

Measurement Computing offers a wide selection of temperature measurement DAQ products. Low-cost solutions such as the USB-TEMP offer thermocouple, RTD and thermistor inputs in one module.

LOW-COST USB

USB-TEMP and TC Series

Channels	8
Thermocouples	✓
RTD	✓
Voltage Inputs	—
Sample Rate	2 S/s/Ch
Isolated	—
Analog Outputs	—
Digital I/O	8

• Software support for Windows, Linux, Android, and macOS

STAND ALONE

WebDAQ 316

Channels	16
Thermocouples	✓
RTD	—
Voltage Inputs	—
Sample Rate	75 S/s
Isolated	—
Analog Outputs	—
Digital I/O	4

HIGH-CHANNEL COUNT

TC-32 (Ethernet, USB)

Channels	Up to 64
Thermocouples	✓
RTD	—
Voltage Inputs	—
Sample Rate	3 S/s/Ch
Isolated	✓
Analog Outputs	—
Digital I/O	Up to 80

• Software support for Windows, Linux and Android

HIGH-ACCURACY

MEASURpoint (Ethernet, USB)

Channels	Up to 48†
Thermocouples	✓
RTD	✓
Voltage Inputs	Up to ±60 V
Sample Rate	10 S/s/Ch
Isolated	✓
Analog Outputs	—
Digital I/O	16

† 500 V isolated channel-to-channel

DEVICE	Channels	Thermocouple Inputs	RTD, Thermistor, Semiconductor, Temperature Inputs	Voltage Inputs	Sample Rate
USB					
USB-TC	8	√	—	—	2 S/s/ch
USB-TEMP	8	√	√	—	2 S/s/ch
USB-2408	8	√	—	√	1 kS/s
USB-2416	16*	√	—	√	1 kS/s
USB-2001-TC	1	√	—	—	4 S/s
USB-2404-UI	4	√	√	√	100 S/s/ch
DT9874 MEASURpoint	8 to 48	√	RTD	√	10 S/s/ch
DT9828	8	√	—	—	600 S/s
DT9829-8	8	√	√	√	960 S/s
WIRELESS					
WiFi-501	1††	—	—	—	10 sec to 12 hrs
WiFi-502	2†	—	—	—	10 sec to 12 hrs
ETHERNET					
E-TC	8	√	—	—	4 S/s/ch
TC-32	32**	√	—	—	3 S/s/ch
DT8874 MEASURpoint	8 to 48	√	RTD	√	10 S/s/ch
LOGGERS					
USB-501	1††	—	—	—	10 sec to 12 hrs
USB-502	2†	—	—	—	10 sec to 12 hrs
USB-601	1††	—	—	—	10 sec to 2 hrs
USB-602	2†	—	—	—	10 sec to 2 hrs
USB-603	2	√	—	—	2 sec to 2 hrs
USB-5104	4	√	—	—	1 sec to 18 hrs
USB-5106	4	—	Temperature, Current, Voltage	√	1 sec to 18 hrs
WebDAQ 316	16	√	—	—	75 S/s

* Expandable to 32 SE/16 DIFF † Measures temperature and humidity
** Expandable to 64 †† Measure temperature directly

Data Loggers

Record and monitor temperature, voltage, current, humidity and more using portable, stand-alone data loggers.

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LOW-COST

USB-500 Series

Channels	1 or 2
Measurement	Temperature, Humidity, Voltage, Current
Sample Rate	1 sec to 12 hrs
Digital I/O	—
Memory	Up to 32 K Readings
Features	LCD Display

• Included software for USB-500/600 Series

MULTI-CHANNEL

USB-5100 Series

Channels	4
Measurement	Thermocouple, Current, Voltage
Sample Rate	1 sec to 18 hrs
Digital I/O	—
Memory	Up to 1.9 Million Readings
Features	LCD Display

• Includes easy-to-use software

INTERNET ENABLED

WebDAQ Series

Channels	Up to 16
Measurement	Thermocouple, IEPE
Sample Rate	Up to 51 kS/s/Ch
Digital I/O	4
Memory	Unlimited
Features	Embedded Web Server

HIGH-SPEED INDUSTRIAL

LGR-5320 Series

Channels	16 SE/8 DIFF
Measurement	Up to ±30 V
Sample Rate	Up to 200 kS/s†
Digital I/O	16
Memory	Up to 32 GB
Features	Quadrature Encoder

• Included DAQLog software to get you up and running
† Correlated analog and digital signals

DEVICE	Channels	Measurement Type	Sample Rate	Memory	Features
LOW SPEED					
USB-501	1	Temperature	10 sec to 12 hrs	16 K Readings	Status LEDs
USB-501-LCD	1	Temperature	1 sec to 12 hrs	16 K Readings	LCD Display
USB-501-LT	1	Temperature	15 min up to 2 hrs	4 K Readings	Ultra Compact
USB-501-PRO	1	Temperature	1 sec to 12 hrs	32 K Readings	Extended Temperature Range
USB-501-TC-LCD	1	Thermocouple	1 sec to 12 hrs	32 K Readings	LCD Display
USB-502	2	Temperature, Humidity	10 sec to 12 hrs	16 K Readings	Status LEDs
USB-502-LCD	2	Temperature, Humidity	10 sec to 12 hrs	16 K Readings	LCD Display
USB-503	1	0 up to 30 VDC	1 sec to 12 hrs	32 K Readings	—
USB-504	1	4 up to 20 mA	1 sec to 12 hrs	32 K Readings	—
USB-601	1	Temperature	10 sec to 2 hrs	250 K Readings	LCD Display
USB-602	2	Temperature, Humidity	10 sec to 2 hrs	250 K Readings	LCD Display
USB-603	2	Thermocouple	2 sec to 2 hrs	250 K Readings	LCD Display
USB-5104	4	Thermocouple	1 sec to 18 hrs	1.6 Million Readings	LCD Display
USB-5106	4	Temperature, Current, Voltage	1 sec to 18 hrs	1.9 Million Readings	LCD Display
HIGH SPEED					
LGR-5325	16	±10 V	Up to 100 kS/s	4 GB (Up to 32 GB)	4 Counters
LGR-5329	16	±30 V	Up to 200 kS/s	4 GB (Up to 32 GB)	4 Quadrature Inputs, Isolated Digital Inputs
WEB ENABLED					
WebDAQ 316	16	Thermocouple	75 S/s	Unlimited	Web Server
WebDAQ 504	4	IEPE	51 kS/s/Ch	Unlimited	Web Server
WIRELESS					
WiFi-501	1	Temperature	10 sec to 12 hrs	> 250 K Readings	LCD Display
WiFi-502	2	Temperature, Humidity	10 sec to 12 hrs	> 250 K Readings	LCD Display

OEM and Embedded Solutions

Board-only solutions with easy to integrate connectors. As a leading supplier of OEM DAQ solutions, MCC provides volume pricing and free technical support.

MULTIFUNCTION USB

USB-201-OEM

Analog Inputs	8 SE
Resolution	12-bit
Sample Rate	100 kS/s
Simultaneous	—
Analog Outputs	—
Digital I/O	8
Interface	USB

- Software support for Windows, Linux and Android

MULTIFUNCTION ETHERNET

E-1608-OEM

Analog Inputs	8 SE/4 DIFF
Resolution	16-bit
Sample Rate	250 kS/s
Simultaneous	—
Analog Outputs	2
Digital I/O	8
Interface	Ethernet

- Software support for Windows, Linux and Android

HIGH SPEED

USB-2637

Analog Inputs	64 SE
Resolution	16-bit
Sample Rate	1 MS/s
Simultaneous	—
Analog Outputs	4
Digital I/O	24
Interface	USB

- Software support for Windows, Linux and Android

HIGH-PERFORMANCE ARM

DT7816

Analog Inputs	8 SE
Resolution	16-bit
Sample Rate	400 kS/s/Ch
Simultaneous	✓
Analog Outputs	2
Digital I/O	16
Interface	Ethernet, USB, microSD

- Embedded ARM processor and Linux on-board

| DEVICE	Bus Type	Analog Inputs	Sample Rate	Resolution	Digital I/O	Counters	Analog Outputs
LOW COST							
USB-200-OEM Series	USB	8 SE	Up to 500 kS/s	12-bit	8	1	Up to 2
USB-230-OEM Series	USB	8 SE/4 DIFF	Up to 100 kS/s	16-bit	8	1	2
MCC 118	Rpi	8	100 kS/s	12-bit	—	—	—
MCC 152	Rpi	—	—	12-bit	8	—	2
BTH-1208LS-OEM	Bluetooth	8 SE/4 DIFF	1 kS/s	12-bit	8	1	2
USB-1208FS-Plus-OEM	USB	8 SE/4 DIFF	50 kS/s	12-bit	16	1	2
E-1608-OEM	Ethernet	8 SE/4 DIFF	250 kS/s	16-bit	8	1	2
USB-1608G-OEM Series	USB	16 SE/8 DIFF	Up to 500 kS/s	16-bit	8	2	Up to 2
SIMULTANEOUS							
USB-1808 Series	USB	8 SE/8 DIFF	Up to 200 kS/s/ch	18-bit	4	2*	2
USB-1608FS-Plus-OEM	USB	8 SE	100 kS/s/ch	16-bit	8	1	—
DT9832/36-OEM Series	USB	2, 4, 6 or 12 SE	Up to 2 MS/s/ch	16-bit	32	5*	Up to 4
DT9837-OEM Series	USB	4 SE with IEPE	Up to 105.4 kS/s/ch	24-bit	—	1	Up to 1
HIGH SPEED							
USB-2600 Series	USB	16 or 64 SE	1 MS/s	16-bit	24	4	Up to 4
DT9834-OEM Series	USB	16 SE/8 DIFF	500 kS/s	16-bit	32	5	Up to 4
DT9844-32-OEM	USB	32 SE/16 DIFF	1 MS/s	20-bit	32	5	—
USB-2020	USB	2 SE	20 MS/s/ch	12-bit	8	—	—
DIGITAL I/O							
USB-DIO24 Series	USB	—	—	—	24	1	—
USB-DIO32HS-OEM	USB	—	—	—	32**	—	—
USB-DIO96H/50	USB	—	—	—	96	1	—
E-DIO24-OEM	Ethernet	—	—	—	24	1	—
COUNTER/TIMER							
USB-CTR-OEM Series	USB	—	—	—	8**	4 or 8**	—

* Capable of measuring quadrature encoders   ** High-speed scanning up to 8 MS/s
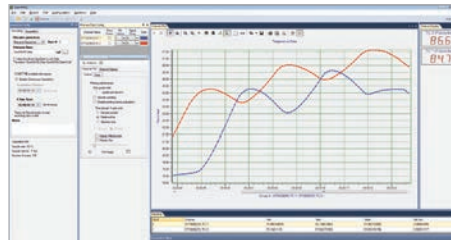
Data Acquisition Software

Software support includes easy-to-use data viewing and logging software, drivers for the most popular applications and languages, and support for various operating systems including Windows®, Linux®, Android™, and macOS®.
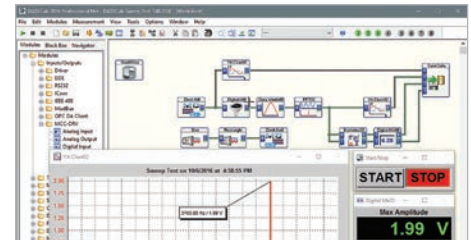
QUICK AND EASY
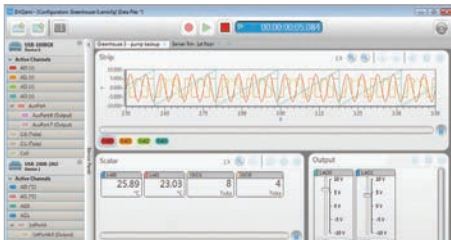
DAQami™

Companion software for acquiring data and generating signals with most MCC devices.
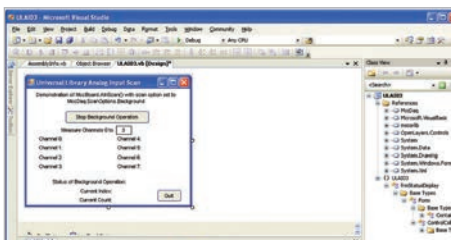
QuickDAQ

Acquire and display from most Data Translation USB and Ethernet DAQ devices.
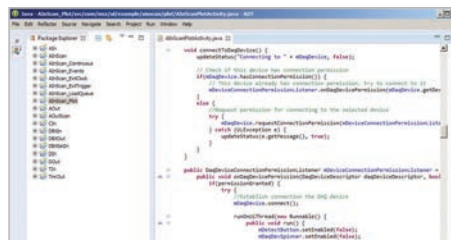
DASYLab™

Real-time analysis, control, and custom GUI's without programming.
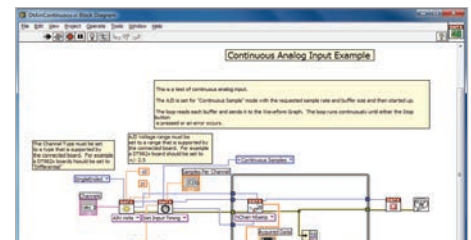
PROGRAMMING SUPPORT

Windows®

Programming API for C®, C++®, C#®, Visual Basic®, Visual Basic® .NET™., and Python™.

Linux® and Android™

Professional drivers are available for most MCC devices.

NI LabVIEW™ and MATLAB®

Comprehensive library of VIs and example programs.

FREE SUPPORT
Free technical support, for the life of your product, is available from qualified application engineers.

30-DAY MONEY-BACK GUARANTEE
If you aren't happy, simply return the product for a full refund (U.S. customers only).

1 YEAR WARRANTY
All products are backed with a one year warranty. Buy with confidence.

FREE SHIPPING
MCC offers free shipping on all orders placed on-line. Shipping charges apply to all other orders.

MEASUREMENT COMPUTING™

Measurement Computing Corporation

UK Distributor

The mission of Measurement Computing Corporation is to provide our customers with PC-based data acquisition hardware and software that will save you time and save you money. We are committed to developing the DAQ products you want, in the form and with interfaces you need. We are always working on new and better products, and welcome your feedback and requests for custom solutions. Our goal is complete customer satisfaction.

Note: Prices and specifications are subject to change without notice.

msl
Measurement Systems Ltd
www.measurementsystems.co.uk
+44 (0) 1635 576800