

With the full-featured Coda (**C**ontinuous **d**ata **a**cquisition) software product family, m+p international provides data acquisition and logging solutions for all applications from the simple to the most complex.

Together with the compact and rugged chassis from United Electronic Industries, Coda is perfectly suited for a wide variety of mobile and test bench applications. The Ethernet-based I/O chassis stand out for their high performance, flexibility, mechanical toughness and small size. United Electronic Industries offers two unique chassis configurations: the very compact 3- or 6-slot cube and the 6- or 12-slot front-loading rack. With over 30 different I/O boards available, there is sure to be a perfect solution for your requirements. Tests configured on your Coda PC can be run fully standalone without the need for a PC or other network connection.

## High Performance, Small Size

The I/O cubes and racks cover a full range of industrial, aerospace and laboratory data acquisition and control applications. Use the cube or rack as a PC front-end for real-time capture and display or upload its acquisition settings to run standalone capturing data to an SD card or an external hard disk via USB. This data can be recovered later and re-played and processed by the Coda software.

The small 3-slot cube only measures 4" x 4" x 4", its "big" brother provides slots for 6 I/O boards and is 5.8" high. They operate from -40 to +85 °C with 5 g (rms) vibration and 50 g shocks. Larger systems are easily built using multiple cubes. However, you can also opt for the rack configurations with slot-in cards. These compact, rugged racks provide two Gigabit Ethernet interfaces and slots for up to 6 or 12 I/O boards, allowing the boards to be quickly and easily installed and removed directly from the front of the rack. Coda allows direct measurement with these boards and can display the actual and calculated results (e.g. strain, acceleration) online. The racks offer 10/100/1000Base-T Ethernet interface.



Coda supports compact, rugged 3- and 6-slot I/O cubes

## Various I/O Boards

A wide variety of I/O boards are available for voltage input, current input, thermocouples, strain gauges, RVDT/LVDT, digital I/O, counter, etc. The boards can be installed in any combination and will provide both ICP® signal conditioning and excitation voltage, thus being ideal for signal mixing. The maximum sampling rate is 125 kHz per channel.

## Standalone Acquisition

For standalone applications Coda supports cubes and racks running a standard Linux operating system. This eliminates the cost of a dedicated host PC. Just make your acquisition settings in the Coda software and download them via Ethernet. The applications will be deployed on the cube/rack and run fully standalone. The cube/rack will store the data on SD, SSD or other HDDs supporting large data sets and high throughput rates. Later you can import this data into Coda for visualization and post-processing.



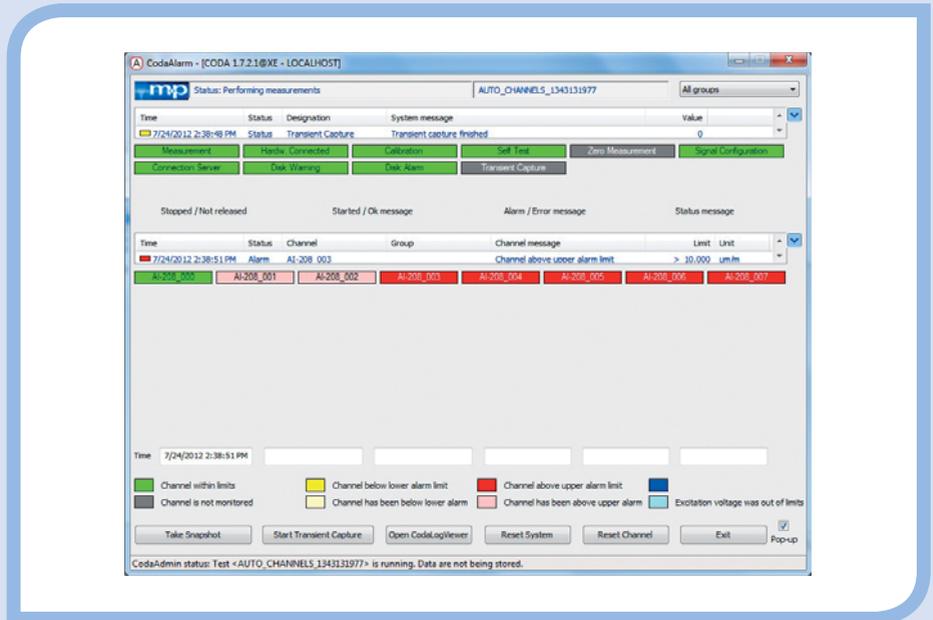
Cubes and racks for standalone data acquisition

## Full-Featured Software for Simplified Operation

Coda is a turnkey software platform for data acquisition, signal analysis and data logging from 1 to thousands of input channels. The intuitive graphical user interface facilitates set-up, operation and analysis, thus leading to accurate, repeatable results quickly. The extensive built-in features include intuitive configuration tools, user-definable channel groups, automatic instrument identification and channel configuration, real-time alarm monitoring and limit checking for every channel, sophisticated data interpretation and display, online graphical data analysis and comprehensive visualization.

Configuration tools include a time-saving feature that enables you to apply changes to complete channel groups instead of entering them channel by channel.

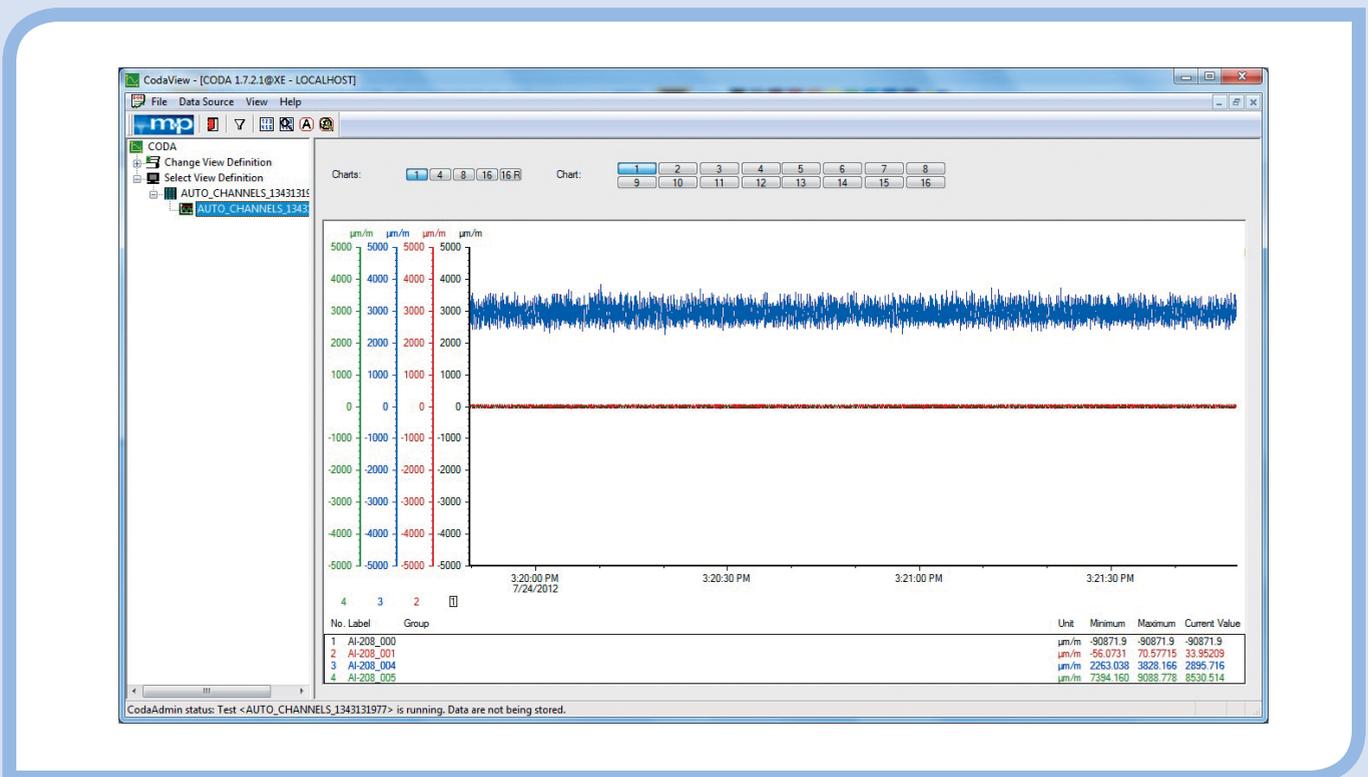
You can store several pre-defined test runs in Coda allowing you to easily switch between different configurations. With Coda connected, a precise 2-point preset calibration can be done for each channel.



Alarm window

## Comprehensive Visualization

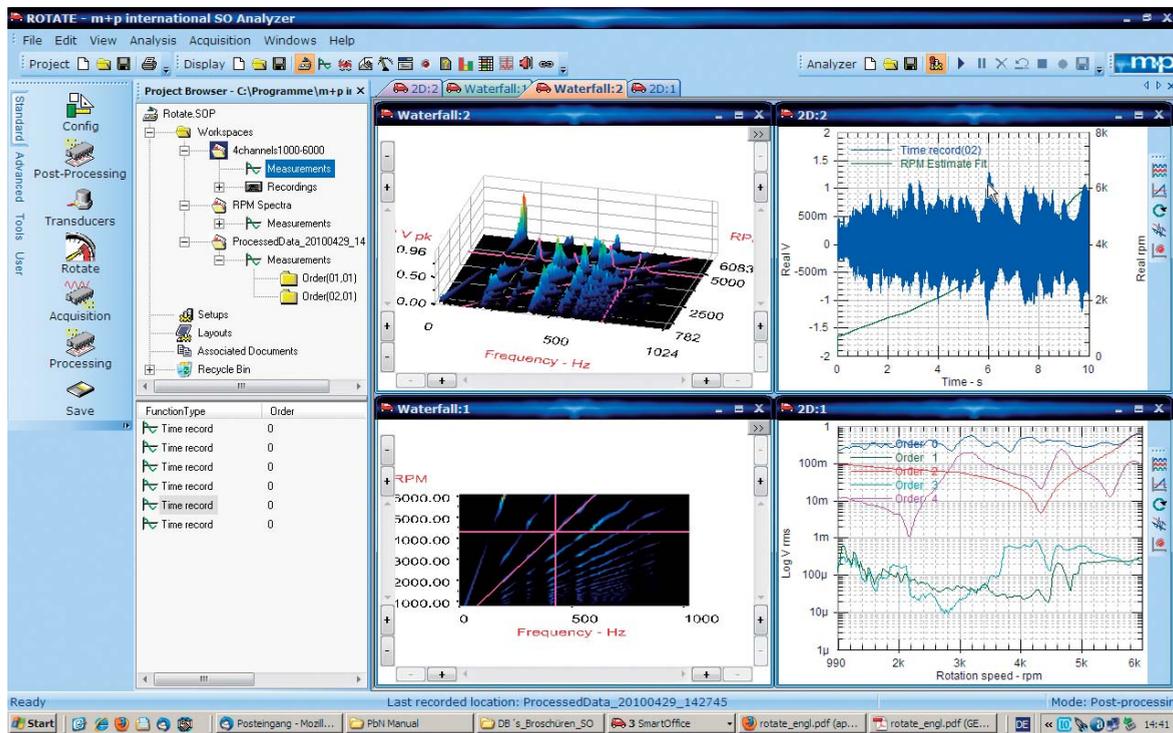
Data channels are visualized by a simple mouse-click. With both online and offline data analysis, the measured values can be graphically displayed in a y/t- or y/x-diagram, as bar chart, tachometer, waterfall, FFT, PSD or digital numbers. Coda allows you to freely design individual graphical interfaces for real-time measurement and visualization. The replay function is used to review events without affecting the live acquisition process. Adjustable forward/reverse and speed make replay easy.



Channel display

## Analysis and Reporting

For comprehensive analysis and reporting, captured data can be exported to the following analysis packages and formats: SO Analyzer, Matlab®, Microsoft Excel, ASCII, CSV and TXT. m+p international's SO Analyzer provides a full range of dynamic analysis applications with extensive capabilities for browsing, viewing, editing, analyzing and reporting data as well as with full ActiveX compliance. Advanced applications include real-time FFT analysis, unlimited throughput to disc recording, structural testing, rotational dynamics and acoustic analysis.



Advanced analysis using m+p's SO Analyzer software

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