

## Spectrum launches the digitizerNETBOX -- a fully integrated, data acquisition solution

Spectrum, a leading manufacturer of high-speed, high-resolution instrumentation, has launched the digitizerNETBOX. This is aimed at industrial users, research and development departments, and engineers who need a high-precision, multi-channel measurement system. The digitizerNETBOX comes complete with software and, when connected to a PC or company network, provides a total measurement solution.



“The digitizerNETBOX is a fully integrated solution,” explained Oliver Rovini, CTO of Spectrum. “This can replace the cumbersome current solution of an assembly of industrial PC, digitiser card, software etc. often from different sources. Our digitizerNETBOX is ready-to-use, straight out of the box providing a pre-tested and configured solution. Also, because it is compact, it can also be used for mobile applications unlike an industrial PC-based solution.”

The digitizerNETBOX is available with two to sixteen-channels of fully synchronous data acquisition. Each channel has its own ADC and its own pre-amplifier, with either 8 or 16 bit resolution and sampling rates up to 200 MS/s. Each amplifier can be individually configured to allow the selection of several different input ranges (from  $\pm 50$  mV up to  $\pm 10$  V), 50 Ohm or 1 MOhm input impedance and AC or DC coupling. Data is stored in an internal 1 GB (512 MSamples) memory and can be readout via Ethernet for processing and analysis. The 16 bit analog inputs offer single-ended (referenced to ground) and true differential input mode. All inputs are equipped with BNC connectors eliminating the need for special cabling or adapters.

In addition, the digitizerNETBOX offers various recording modes and an extremely comprehensive trigger engine. For example, the two external trigger sources, as well as each input channel, can all be used to produce a valid trigger. Users can select from edge, level, window, spike or pulse width

trigger modes. Each individual trigger input can be combined with others to create conditional pattern triggers with standard AND/OR logic. Supported recording modes include single shot (Transient Recording), streaming (FIFO), segmented (Multiple Recording), gated (Gated Sampling) or the combination of segmented and slow chart recorder operation (ABA mode). Controlling and accessing the data collected by the digitizerNETBOX is done by a direct GBit Ethernet connection to a host computer (e.g. laptop or workstation), or anywhere on the corporate network. The platform is fully LXI compliant (following Core 2011 Specifications) and offers an IVI compatible interface for the IVI Scope and digitiser classes.

The digitizerNETBOX comes complete with Spectrum's software **SBench 6 Professional**. The software supports all the control modes and settings of the hardware through an easy-to-use interface. The software is able to run the cards in oscilloscope mode as well as streaming mode for long time transient recording. A special feature of SBench 6 is the segmented view that displays segment-based signals together with signals acquired with a second time base (ABA mode) along with precise trigger timestamps. Additionally, SBench 6 has a host of built-in features for data analysis and documentation. These include FFT analysis, XY display, a function interpreter, several integrated analysis functions, export into ASCII, Wave, MATLAB, comment functions for signals and display details as well as a simple printout function. Customers who want to create their own customized software can do so using the Spectrum drivers for Windows and Linux. The drivers are included in the delivery together with a set of standard programming examples to illustrate the instruments main signal capture functions. Extensive support includes Visual C++, Borland C++, Gnu C++, Visual Basic, VB.NET, C#, J#, Delphi and Python code.

A 2-years manufacturer warranty is standard for all Spectrum hardware products. Drivers, software and firmware updates are available free of charge as well as the support given directly by the developer engineers themselves.

Short feature video of the system at [www.dqsolutions.co.uk/digitizernetbox-video-page.htm](http://www.dqsolutions.co.uk/digitizernetbox-video-page.htm)

Full product information at [www.dqsolutions.co.uk/digitizernetbox-fast-ethernet-signal-capture.htm](http://www.dqsolutions.co.uk/digitizernetbox-fast-ethernet-signal-capture.htm)

**Please contact experienced U.K. distributor DataQuest Solutions Limited for pricing, delivery and any further technical details that you might require. We will be pleased to help.**

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