

## Spectrum adds fast 200 MS/s digitisers to its digitizerNETBOX range of Ethernet/LXI products

**October 2013:** Manufacturer Spectrum GmbH, specialists in high-speed instrumentation design, has expanded its range of digitizerNETBOX products by adding three new models to the series. The new products feature fast ADC technology, which can sample signals at up to 200 MS/s, extending the overall frequency capture range of the digitizer family.



The three new models (DN2.203-02, -04 and -08) come with two, four or eight channels. Each channel has its own 100 MS/s, 8-bit ADC and an independent amplifier; channels can even be combined to allow faster 200 MS/s sampling rates. All the channels are synchronously clocked, minimizing phase error and allowing inter-channel measurements to be made with the best possible precision. The amplifiers have calibrated gain and signal offset so that measurements can be made using the full dynamic range of the ADC. Digitized signals are stored in large on-board memories (up to 2 x 4 GS) making it possible for the digitizerNETBOX to acquire, store and analyse very long and complex waveforms. For example, at a sampling rate of 100 MS/s you could synchronously acquire eight different signals, with each lasting up to ten seconds!

Like all models in the digitizerNETBOX range these new products have a host of features that make them ideal for general purpose, remotely controlled, signal acquisition and measurement. The units include an array of smart triggering capabilities and acquisition modes. Trigger on problem signals like glitches, drop-outs and bursts, or even when specific patterns occur and then store the recorded waveforms in the most memory efficient way possible. Transient capture, gated sampling, data streaming and chart recorder modes are all supported.

To control and access the data collected by the digitizerNETBOX simply connect it via GBit Ethernet to a host computer (e.g. laptop or workstation) or anywhere on the corporate network. The instrument is fully LXI compliant (following Core 2011 specifications) and offers an IVI compatible interface for the IVI Scope and IVI Digitizer classes. You can write your own control program using almost any popular language including, Visual C++, Borland C++, Gnu C++, Visual Basic, VB.NET, C#, J#, Delphi and Python code.

Alternatively, you can simply run Spectrum's own software SBench6-Pro. SBench6 comes as standard with the products. It lets you control all the modes and settings of the hardware via a simple, easy to use, interface. The software also 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 annotating signals or displays and even a simple printout function.

The digitizerNETBOX products are designed for both industrial users, as well as those in research and development, where the focus is to create a high-precision multi-channel measurement system. When connected to a PC or company network the products provide a total measurement solution.

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.

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)

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