



www.bedrock-audio.com



Bedrock DSP500

Unrivalled processing power and flexibility in a single, compact unit

The Bedrock DSP500 is a digital signal processor for high-end professional audio installs - and so much more. Taking up just one height unit in your 19" rack, it is capable of replacing a multitude of other signal processors, matrix switchers, AD- and DA convertors and Cobranet extenders. Moreover, the DSP500 can be customised to communicate directly with PLC's or other control equipment, due to its highly flexible architecture.

What is Bedrock?

Bedrock is a brand new range of products for professional audio applications, designed primarily with the needs of permanent installations in mind. The Bedrock product range comprises products for processing and controlling audio, such as the DSP500, as well as products for measuring and testing (such as spectral analysis and Speech Transmission Index measurements).

All Bedrock products are designed and manufactured in the Netherlands by Embedded Acoustics.

Why choose the DSP500?

The DSP500 is a full-featured and highly flexible digital signal processor, housed in a compact

and elegant 19-inch 1U unit. It comes standard with 8 analog inputs and 8 analog outputs and a redundant Cobranet™ digital interface capable of handling 16 more input and output channels - no need to buy expensive insert modules. The device is easily configured through the internal web-interface, by just hooking up your laptop to the RJ45 LAN connector on the front panel. You will not need proprietary software to configure the unit - any web browser will do.

If somehow the standard device falls short of your project's needs in any way, consider getting it customized by the Embedded Acoustics development team. The DSP500 can be customised for just about any particular application - whether this is adding a control interface, extending its digital signal

processing features or changing the user interface. Do you have a particular need, such as interfacing with a PLC, recording or logging audio traffic, or streaming MP3 audio straight to and from the internet? Just about anything is possible. Embedded Acoustics offers affordable customization services, but also gives SDK access to value added resellers.

Where to buy?

You can buy Bedrock equipment straight from the manufacturer through our online shop, or from any of our distributors. Please refer to our website for up-to-date information on product details and pricing. Our distributor list is also found on our website:

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Sound, science, solutions

Bedrock DSP500

Product features

The DSP500 offers the following features:

- Based on our proprietary BSP64 signal processor, combined with a general-purpose dual-core Intel® Atom processor.
- Flexible matrix switching and mixing enables just about any signal path
- Filtering, EQ, delay, compression, mixing - available on every channel.
- 8 analog single-ended outputs (cinch connectors)
- 16 digital Cobranet™ output channels
- 8 analog single-ended inputs (cinch connectors)
- 16 digital Cobranet™ input channels
- Optional: 8 additional balanced analog inputs and 8 additional balanced analog outputs (Phoenix /cable clamp connector)
- Configuration with internal web-based interface through front-panel LAN port.
- Full-colour OLED display and navigation buttons for quick manual settings or choosing presets.
- Separate, fire-walled Gigabit LAN port on rear panel for external control and networking.

Technical specifications

Technical specifications of the DSP500 include:

- Internal processing at 48 kHz, 45 bits.
- 48 kHz, 24/16 bit AD/DA conversion through multi-bit sigma delta conversion
- Dynamic range on analog outputs > 110 dB; on analog inputs > 100 dB.
- Total latency in digital processing and I/O max. 0.1 ms; ADC and DAC latency max. 0.4 ms.
- Filtering with 1024-coefficient linear minimum-phase FIR filters
- 16 Mbit of memory for delay lines
- Standard 1U 19 inch form factor case
- Powered from 100-230V mains (rated max. 60W)

Availability

The DSP500 will be available for sale starting 1 January 2013. The manufacturer suggested retail price is €2499,-

During the course of 2013, we will expand the DSP500 family with devices offering additional balanced analog IO and AVB connectivity (in addition to the standard Cobranet interface).

Bedrock is a Registered Trademark of Embedded Acoustics BV. For more information on Bedrock products, please refer to our websites:

www.bedrock-audio.com
www.embeddedacoustics.com

For information on product pricing, finding local distributors or placing orders:

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T: +31 88 8770700

For technical questions regarding our Bedrock product line:

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Embedded Acoustics is committed to sparking innovation in the fields of acoustics, speech and hearing. Our mission is to translate scientific knowledge and high-tech engineering into working, real life products and services. We're not just talk - get in touch and find out what we are all about: expertise, experience and a practical mindset.

