



Upgradeable, open and communicating!

The **NetdB acquisition unit** is part of the latest generation of data acquisition systems designed for noise and vibration applications.

NetdB is a **versatile system** that can be used:

- ▶ **In stand-alone mode with a Pocket PC** remote control, using the recording and storage capacities of the instrument,
- ▶ **In real-time recorder/analyser mode**, from the dBFA Suite software or from a Labview / Matlab / C/C++ application.

NetdB

Increase your recording capabilities...

NetdB: An upgradeable acquisition front end

Used as a single unit or chained, NetdB is extremely flexible and can turn to a system with multiple active and synchronised channels.

- ▶ **4, 6, 8, 10 or 12-channel NetdB**, based on firmware customisation
- ▶ 20-channel NetdB using an **additional rear card** (8 channels)
- ▶ **Multichannel NetdB**, by **chaining** of NetdB units using long-distance Ethernet cables (patented connection)

NetdB: An open platform

Versatile and open, NetdB can be used in stand-alone mode or in PC acquisition mode.

- ▶ **Embedded internal hard disk** up to 85 GB
- ▶ **Built-in batteries** with a 2 h operating life, depending on selected configuration
- ▶ **Possible control** from **LabView, Matlab, C+/C++**,...
- ▶ **Compatibility** with industrial applications (dBFA Suite, dBPower, dB Sonic, ...)

NetdB: A communicating system

Wire-based and/or wireless communication: Adaptation of NetdB for better on-site efficiency

- ▶ **Ethernet connection** for data synchronisation and transfer to PC for analysis
- ▶ **WiFi connection** for control via Pocket PC WiFi remote control
- ▶ **Signal generation** (Sine / Sweep / Burst / White noise / Pink noise / MLS / WAV)
- ▶ **Stereo audio output**: Jack and AES/EBU standard digital connectors

Enhance your know-how in:

- ▶ Sound Power
- ▶ Sound Quality
- ▶ Sound Analysis
- ▶ Vibration Analysis



Features	NetdB
<p>Connectivity PC connection (type/speed): Extension connection (chaining): Pocket PC connection (type/speed): Internet connection:</p> <p>Processing power Processor speed: Operating system: Memory: Storage:</p> <p>Number of channels Number of basic channels: Maximum rate:</p>	<ul style="list-style-type: none"> ▶ RJ45 Ethernet connector / 100MBits ▶ RJ45 Ethernet connector / 100MBits ▶ WiFi 802.11g / 54Mbps ▶ Possible connection to an ADSL router for remote acquisition via the Internet <ul style="list-style-type: none"> ▶ 600 MHz ▶ Windows XP Embedded ▶ RAM: 256 MB ▶ 100 GB hard disk with 85 GB dedicated to signal storage (12 hours of continuous measurement, 12 channels at 51.2 kHz over 24bits) <ul style="list-style-type: none"> ▶ 12 ▶ 250 channels at 12.8 kHz over 24bits
<p>Analogue channels Input connectors on channels: Input impedance: Maximum voltage allowed: Input ranges:</p> <p>Power supply for transducers:</p> <p>Coupling: Anti-aliasing low-pass filter: Frequency response: Dynamic range: Crosstalk: Total harmonic distortion (THD): Inter-channel phase difference: Linearity: Drift: Signal output: Headphones: Digital Input/Output: Connection to digital PC:</p> <p>Digital channels Analogue / Digital conversion: Digitisation: Full scale: Sampling frequency:</p>	<ul style="list-style-type: none"> ▶ BNC with high-rigidity frame ▶ 1 MΩ ▶ -20V/+30V peak ▶ 10 V rms (from -15 V to +15 V), 1 V rms (from -1.5 V to +1.5 V), 100 mV rms (from -150 mV to +150 mV) ▶ IEPE (ICP[®], ISOTRON[®], DELTATRON[®]...) - 4mA ▶ 200 V on additional 8-channel rear card ▶ DC, AC 0,3 Hz, AC 20 Hz ▶ Low-pass filter: depending on the sampling frequency; slope > 140 dB per Octave ▶ ± 0.5 dB ▶ 97 dBA (1V) - 107 dBA on 200V input of the additional card ▶ 80 dB or less ▶ 0.001% or less ▶ < 0.5° or less (for the same input condition, 20 Hz AC coupling) ▶ $\pm 0.1%$ or less ▶ $\pm 0.1%$ or less (from 15 min to 2 h after start up) ▶ 2 BNC connectors (+/-10V), Sine/Sweep/Burst/White noise/Pink noise/MLS/WAV generator ▶ Jack connector – Stereo output for headphones ▶ RCA connector (SPDIF) ▶ 4 USB II connectors (rear panel) <ul style="list-style-type: none"> ▶ Sigma-Delta (128x) ▶ Linear 24 bits ▶ $\pm 100%$ ▶ 51.2 kHz, 25.6 kHz, 12.8 kHz
<p>Power supply Connector: Voltage/current: Mains adapter: Consumption: AC adapter (delivered with NetdB): Car adapter (delivered with NetdB): Battery: Battery lifetime:</p> <p>Physical characteristics Dimensions: Weight: Mechanical interface:</p> <p>Environmental characteristics Operating temperature: Storage temperature/humidity/pressure: Operating position: Resistance to vibration: Resistance to shocks: Vibration class: Noise emission: EMI:</p> <p>Safety:</p>	<ul style="list-style-type: none"> ▶ Neutrik XLR ▶ 12 V-14 V max. 5A ▶ External mains adapter 100/240VAC - 50-60 Hz ▶ 20 W ▶ AC (90-250V, 50 or 60 Hz) ▶ DC 9-18 V with jack ▶ Internal 4000mAH NiMH ▶ 2h at full speed with 12 channels operating <ul style="list-style-type: none"> ▶ 250 mm(L) x 85 mm(H) x 263 mm(D) without projections ▶ 4.5 kg ▶ 4 M4 holes (200mm x 60mm) on the right and left sides for mounting <ul style="list-style-type: none"> ▶ from 0°C to 60°C ▶ -10° +70°C / 10 - 90% HR (without condensation) / 800 - 1050 hPa ▶ Horizontal and vertical ▶ 10 ms-2 (9-200 Hz), 3 mm (2-9 Hz) while operating ▶ 250 ms-2 (2 ms) while operating ▶ EN60721-3-4 class 4M5 ▶ LWA 49dBA when the fan is on, LWA 33dBA when the fan is off, software selectable (ISO7779) ▶ EN55011, EN55014, EN61000-4.2, EN61000-4.3, EN61000-4.4, EN61000-4.5, EN61000-4.6, EN61000-4.11 ▶ UL3101-1; CSA C22.2 No.1010.1; EN 61010-1 A1+A2

The aforementioned characteristics can be changed without notice. Rev.: 07/2008

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