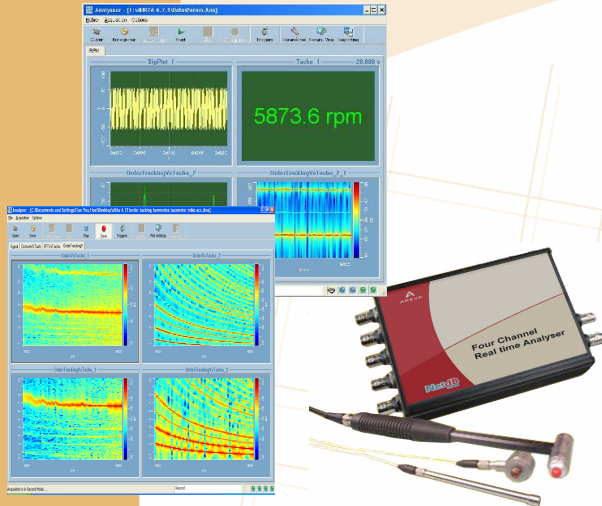


Full Performance 4ch Analyzer for using anywhere!



dBFA Suite along with a most compact 4+1 channel USB-II data acquisition unit makes **PRO-117-EXT** a quite unique high resolution measurement system:

- 4 channels 24 bit DAQ (DC-20 kHz Full Frequency range) plus Tacho and Ext. Trigger inputs
- Parallel Real time processing and recording
- Applications oriented processing tools
- Data Import/Export capabilities
- TCP/IP commands on open Software platform for custom development

Your ideal Sound & Vibration analyzer on the field!

PRO-117/EXT

Key Features...

Hardware Platform

- ▶ 4 simultaneous, 24-bit Delta-Sigma over 52kHz A/D channels
- ▶ Support for four IEPE inputs, including 4mA AC or DC coupling
- ▶ Current source
- ▶ Portable operation. No external power supply needed. Runs on USB power
- ▶ Tachometer input support in the A/D data stream for synchronizing measurements
 - ▶ Sampling rate of over 52kHz to meet your application needs
- ▶ Programmable triggers: software, TTL, analog threshold

A complete set of Software tools

- ▶ Simultaneous real-time multi-analysis as:
 - ▶ Averaged and multi-spectra with FFT and 1/1 down to 1/48 octave
 - ▶ Cross-spectra, Statistics...
- ▶ Advanced software package for:
 - ▶ Frequency Response Functions,
 - ▶ Order analysis (option),
 - ▶ Transient & Impact Testing analysis (option)
- ▶ Application oriented post-processing functions with analysis scripts
- ▶ Transducers Database management: Sensors, calibrators, calibration history,...
- ▶ Data Import/Export: ASCII, UFF58, Wave, nCODE, Matlab™, MeScope, mp3, SDF, ASAM/ODS, SONY, TEAC (Digital format)
- ▶ Bi-directional link to Matlab™ and compatibility with Office software suite
- ▶ Automatic reporting capabilities from real-time and post-processing modules

Options

- ▶ RPM recording and Order analysis
- ▶ Sound Imaging and Mapping
- ▶ Sound Quality and Sound Perception

A full range of Applications in:

Automotive
Aeronautics
Railway
Mechanics
Materials
Construction
Machines
Building industry
Electric appliances/IT
Household appliances
Telecommunications

PRO-117/E Technical Specifications



Features	PRO-117/EXT	Features	PRO-117/EXT
Hardware Analog input channels: Channel input connectors: Analog output channels: Digitization: Maximum Sampling Rate: Minimum Sampling Rate: Tacho channels: Maximum Input Frequency:	<ul style="list-style-type: none"> ▶ 4, single ended, simultaneous ▶ BNC with high rigidity frame ▶ 1 (BNC connector) ▶ 24 bits linear ▶ 52.734kHz ▶ 195.3Hz ▶ 1 (31 bits) ▶ 380kHz 	Environmental Operating temperature: Storage temperature: Humidity Altitude: EMI: Immunity:	<ul style="list-style-type: none"> ▶ 0°C to 55°C ▶ -25 to 85°C ▶ 95% RH (no condensation) ▶ Up to 10000 feet ▶ FCC Part 15, EN55022:1994 +A1:1995+A2:1997 VCCI, AS/NZS 3548 Class A ▶ EN 61000-6.1:2001
Analog input/output Characteristics Input impedance: Input range: Maximum allowable voltage: Overvoltage protection: Sensor power supply: Dynamic range: THD External trigger: Trigger logic family: Output Range:	<ul style="list-style-type: none"> ▶ 1MOhms ▶ 10V rms (-15V to +15V), 1V rms (-1.5V to +1.5V), ▶ ±20V (power off), ± 30V (power on) ▶ ±40V ▶ IEPE ▶ 106dB ▶ -90dB typically ▶ BNC connector ▶ LVTTTL inputs ▶ ±10V 	Physical Dimensions: Weight: Power supply Power, +5V:	<ul style="list-style-type: none"> ▶ 100mm(W) x 18mm(H) x 190mm(D) excluding projections ▶ 491g ▶ ±5V @0.5A

Features	PRO-117/EXT
Software dBFA Suite (Recorder - Analyzer - Post-Processing):	<ul style="list-style-type: none"> ▶ Simultaneous signal recording and real-time multiprocessing and monitoring, post processing analysis (Average 1/n octave, 1/n octave vs. time, Average FFT, FFT vs. Time, FRF...) ▶ Calculation on spectra and signals, ▶ Color spectrogram and waterfall, ▶ Tacho acquisition, ▶ Signal edition, ▶ Import of Teac/Sony files... ▶ Reporting Module. Analyzer and post-processing option
Software options (included in PRO-117/EXT-A):	<ul style="list-style-type: none"> ▶ RT Automation (User-defined sequential acquisition procedure); ▶ Transient / Impact mode: Coordinates management, user defined windowing, Me' scope format export, Reporting Module both in Analyzer and post-processing; MATLAB communicator in Post-processing ▶ Order (Analysis and Tracking in Real Time and post-processing) ▶ Time-Frequency Transforms, De-noising, Convolution (Post Processing on signals)

Ordering Information:

USB-II-EXT: 4+1ch data acquisition front-end, AC/DC/IEPE inputs, 1

SFA4050000: Software dBFA Recorder - Analyzer - Post-Processing: simultaneous signal recording and real-time multiprocessing and monitoring, post processing analysis (Average 1/n octave, 1/n octave vs. time, Average FFT, FFT vs. Time, FRF...), calculation on spectra and signals, color spectrogram and waterfall, tacho acquisition, signal edition, import of Teac/Sony files....

Options (included in PRO-117/EXT-A):

SFA4060000: RT Automation

SFA4061000: Transient / Impact mode

SFA4022000: MATLAB communicator

SFA4044000: Order Analysis and Tracking

SFA4038000: Time-Frequency Transforms, Denoising, Convolution... Data format: CMG documented, UFF, MatLab, WAV, ASCII.

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the presented characteristics are subject to change without notice. kev:us/2007

