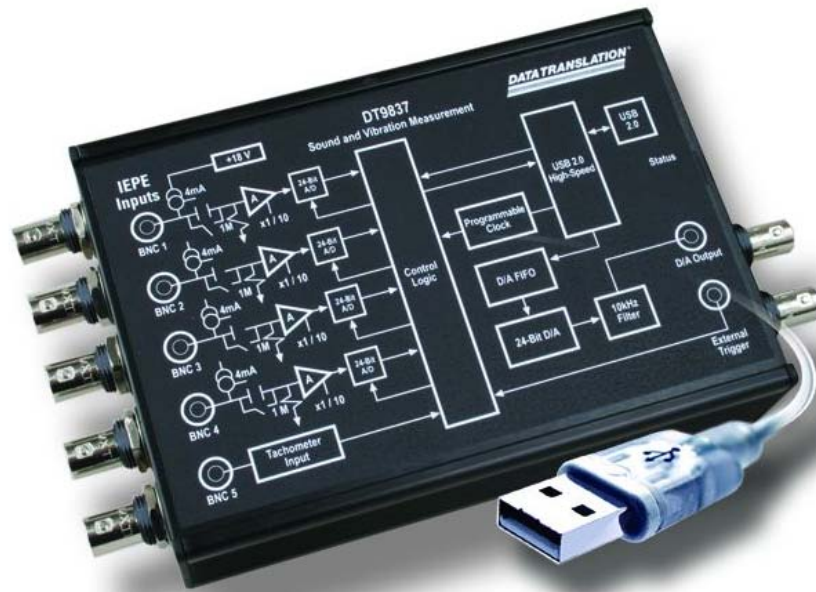


Akulap supports measurement interfaces from Data Translation

Up to 64 channels /200kHz samplerate depending on the platform



Features for the DT9837A:

- 4 channels simultaneously
- bandwidths DC-24kHz for each channel
- Resolution 24bit
- Constant current interface IEPE/ICP to connect Microphones or sensors directly
- Calibrated voltage range up to +/-10V
- Streaming interface
- Calibrated output DC to 10kHz
- USB bus powered



The IEPE allows connecting sensors like microphones or accelerometers directly.

With Akulap you can combine its advanced DSP functions with the measurement interface:

This includes:

- Weighting in the time and frequency domain
- Calibration to SPL
- High resolution FFT+Distortion analysis
- Real time 3D display
- Digital Filter
- Real-time 1/3 octave analyzer
- Long term recording and analysis
- Room and building acoustics
- Psycho acoustics e.g. SONE, Tonality



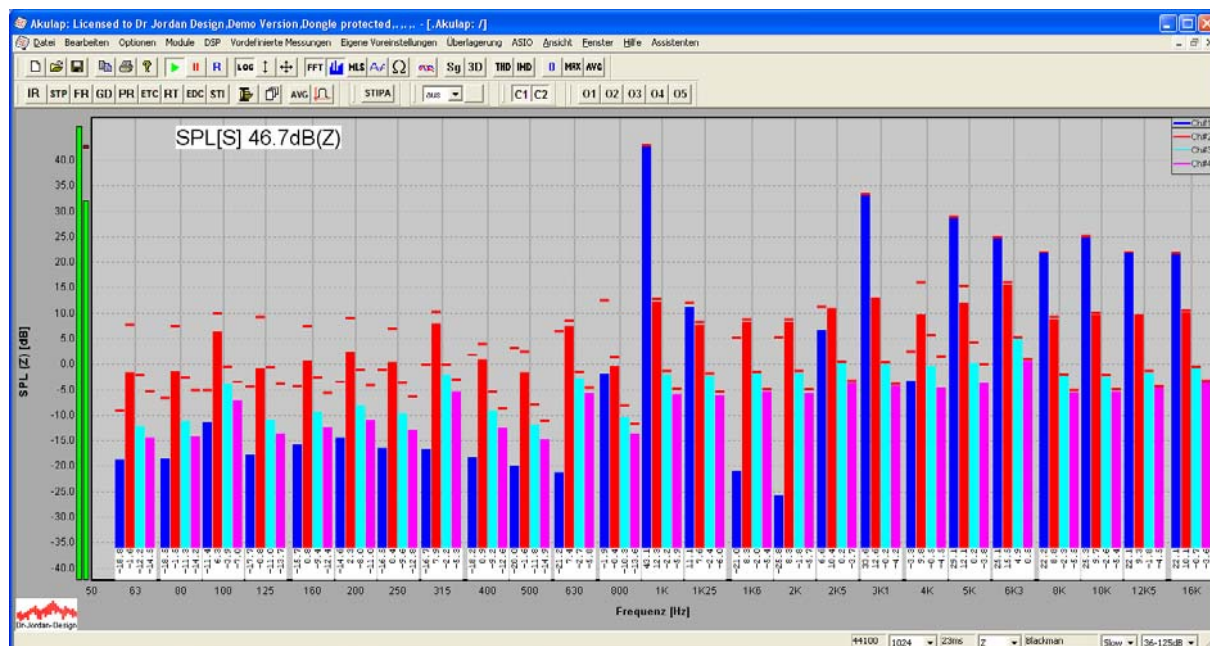
From the Data Translation series we support the following devices:

DT9837A 4 channels with DC to 24Khz with IEPE/ICP via USB
DT9857E-08/16: **8 or 16** channels with DC to **50Khz** with ICP via USB
DT9847-1-1/3: 1/2/3 channels with DC to 100Khz with ICP via USB. Ideal for
 ultrasonic measurements

Normally, Akulap uses USB audio interfaces, but using the Data Translation interface offers many advantages:

- Multichannel up to 16 channels simultaneously (up to 64 channels are possible)
- constant current interface IEPE/ICP connecting sensors like microphones or accelerometers directly
- Calibrated voltage ranges up to 10V
- Gapless streaming without glitches
- Very linear frequency response
- DC capability

4 channel 1/3 octave RTA



Configuration dialog for DT9837A

Data Translation DT9837A ✖

	channel A coupling: DC range: +/-1V Sensitivity (mV/Pa): 50 Show SPL: <input type="checkbox"/>	channel B coupling: ICP/IEPE range: +/-10V Sensitivity (mV/Pa): 50 Show SPL: <input checked="" type="checkbox"/>	channel C coupling: AC range: +/-10V Sensitivity (mV/Pa): 50 Show SPL: <input type="checkbox"/>
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DT9857 with 16 channels



- 16 Channels Analog input IEPE/ICP 24 bit +/-10V (optional gain x10) up 105kHz samplerate (bandwidth 52kHz)
- 2 Channels Analog output 24 bit +/-10V up to 216kHz samplerate

AkuLap with 16 channels FFT

