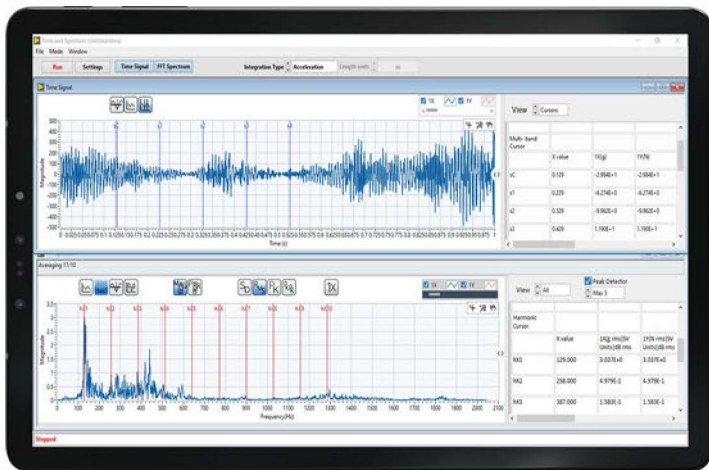


T-DAQ IEPE

USB based portable FFT analyzer for Vibration & Acoustic Measurements

A truly economic noise and vibration analyzer, dual-channel ICP® (IEPE) digital signal conditioner, T-DAQ IEPE offers standard plug & play USB class one audio digital output. Hassle free setup and intuitive functionality by just plugging the unit into a USB port and viewing signals from accelerometers, microphones, hammers, or any other IEPE/ICP-type sensor using the powerful and intuitive T-ViB™ software. Existing third-party Windows®, or Linux® software can be used to acquire time waveforms, frequency spectra, overall vibration levels, FRF's and octave measurements or simply record data for further analysis. Compact form factor, versatility, and powerful software options make this the perfect DAQ for taking in-situ measurements. Whether you're a novice or an expert in test and measurement systems; or simply want to add digital, portable functionality to your existing sensors in lab or industry; the T-DAQ IEPE is a practical and affordable addition to your tool set.



OVERVIEW

- Swiftly hear, acquire, save & post-process on-the-go
- Powerful T-ViB™ modular software for sound and vibration analysis
- High-quality, 24-bit, broad-frequency measurements
- 2-channel ICP (IEPE) sensor inputs
- Stethoscope mode for monitoring real-time vibration signal.
- 100% Plug & play
- Compact form-factor
- Most economical solution for industry and academia.
- Compatible with LabVIEW™, and a variety of time and frequency signal analysis programs

TYPICAL APPLICATIONS

- General conditioning monitoring of pumps, motors, compressors, fans, gearboxes, bearing etc. based on the recent ISO 20816 standard
- Vibration meter: Running RMS, Peak, Skewness, Kurtosis, Crest factor etc.
- Sound level meter: SPL, Octave, Leq, Lpk, L10, L50, L95, A/B/C/fast/slow filters etc.
- Sound & vibration measurements: FRF, isolation, transmissibility, Impact testing, shaker testing and correlation studies
- Human Vibration Analysis based on ISO 8041-1:2017 standard
- Bump testing, order analysis, balancing and run-up/run down testing.
- Educational laboratory experiments



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HARDWARE SPECIFICATION

| | |
|------------------------------|---|
| Number of Input Channels | 2 |
| Sampling Frequency | 48 kHz per channel |
| ADC Bit Resolution | 24 Bits |
| Input Voltage Range | ± 10 V |
| Input Connectors & Interface | BNC, Single Ended, IEPE, 24V, 4mA |
| Input Coupling Type | AC(Highpass filter at 1.8 Hz optional 0.03Hz) |
| Input Impedance | 510 k Ω |
| Frequency Response | 1.8 Hz - 22.8 kHz |
| Frequency Accuracy | 50 PPM |
| Anti-aliasing Filter | 22.8 kHz at Sampling Rate 48 kHz |
| Voltage Accuracy | ±0.5% at 1 kHz |
| Output Connector & Interface | ϕ 3.5 mm Stereo Audio Jack |
| PC Interface | USB 2.0 Full Speed / USB 1.1 Bus powered by USB port, |
| Power | Max. 0.5W |
| Power Consumption | Max. 0.5W |
| Dimensions | 128 (L) \times 57 (W) \times 24 mm |