



KIBOX LAB 5280A

High-end multichannel charge amplifier and data acquisition system

The KiBox Lab 5280A represents the next generation of all-in-one signal conditioning and data acquisition systems for piezoelectric, and voltage signals. It combines the industry's most precise charge amplifier technology with high-speed DAQ in a single, compact laboratory device.

Engineered for the most demanding R&D applications, from micro-vibration and cutting force analysis to high-speed pressure dynamics across aerospace, machining, energy, and academic research.



ALL-IN-ONE SOLUTION

- Up to 16 channels with 16 analog outputs and data acquisition for full system integration



INDUSTRY-LEADING LOW-NOISE PERFORMANCE

- < 1 femto coulomb inherent noise for dynamic measurements in dedicated environments



MODULAR & SCALABLE

- Supports HPEAQ (charge), VAQ (voltage)
- 8 digital inputs, 8 digital outputs
- REST API
- Field-reconfigurable



WIDE CHARGE RANGE

- $\pm 1 \dots 3,000,000$ pC FSO



HIGH-SPEED, HIGH-PRECISION DAQ

- Up to 2.5 MSps per channel sampling rate
- Up to 300 kHz charge input bandwidth (-3 dB)
- Ultra-fast response with < 6 μ s group delay



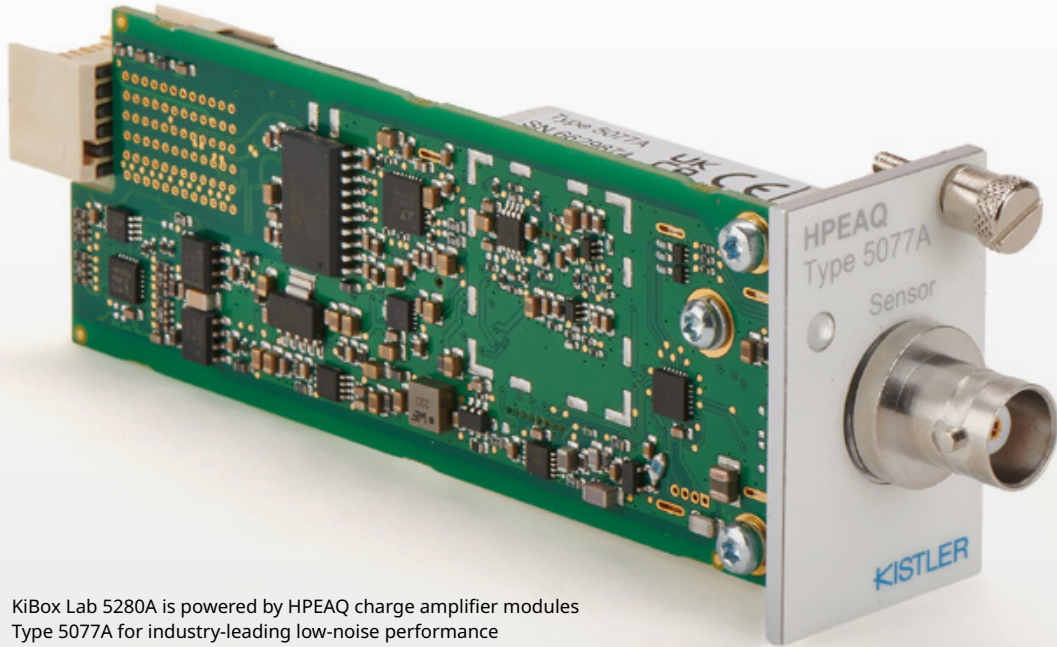
BROWSER-BASED OPERATION

- Access via any standard web browser
- IEEE 1588 PTP time synchronization for precise multi-device setups



FEATURE-BASED LICENSING

- Activate features like virtual channels, FFT or high-speed DAQ on demand
- Future-proof and scalable



KiBox Lab 5280A is powered by HPEAQ charge amplifier modules Type 5077A for industry-leading low-noise performance

HPEAQ 5077A high-end charge amplifier module

The single-channel 5077A HPEAQ module delivers the industry's best noise performance for piezoelectric measurements. Fully galvanically isolated and supporting quasi-static and dynamic measurement applications with flexible time constant adjustment.

Measuring range	$\pm 1 \dots 3,000,000 \text{ pC}$
Noise (1pC @ 1...1,000 Hz)	$< 0.001 \text{ pC rms}$
Bandwidth	up to 300 kHz

VAQ 5270B voltage module

High speed single-channel general purpose voltage signal interface.

- $\pm 60 \text{ V}$ input range
- Galvanically isolated
- Up to 800 kHz bandwidth