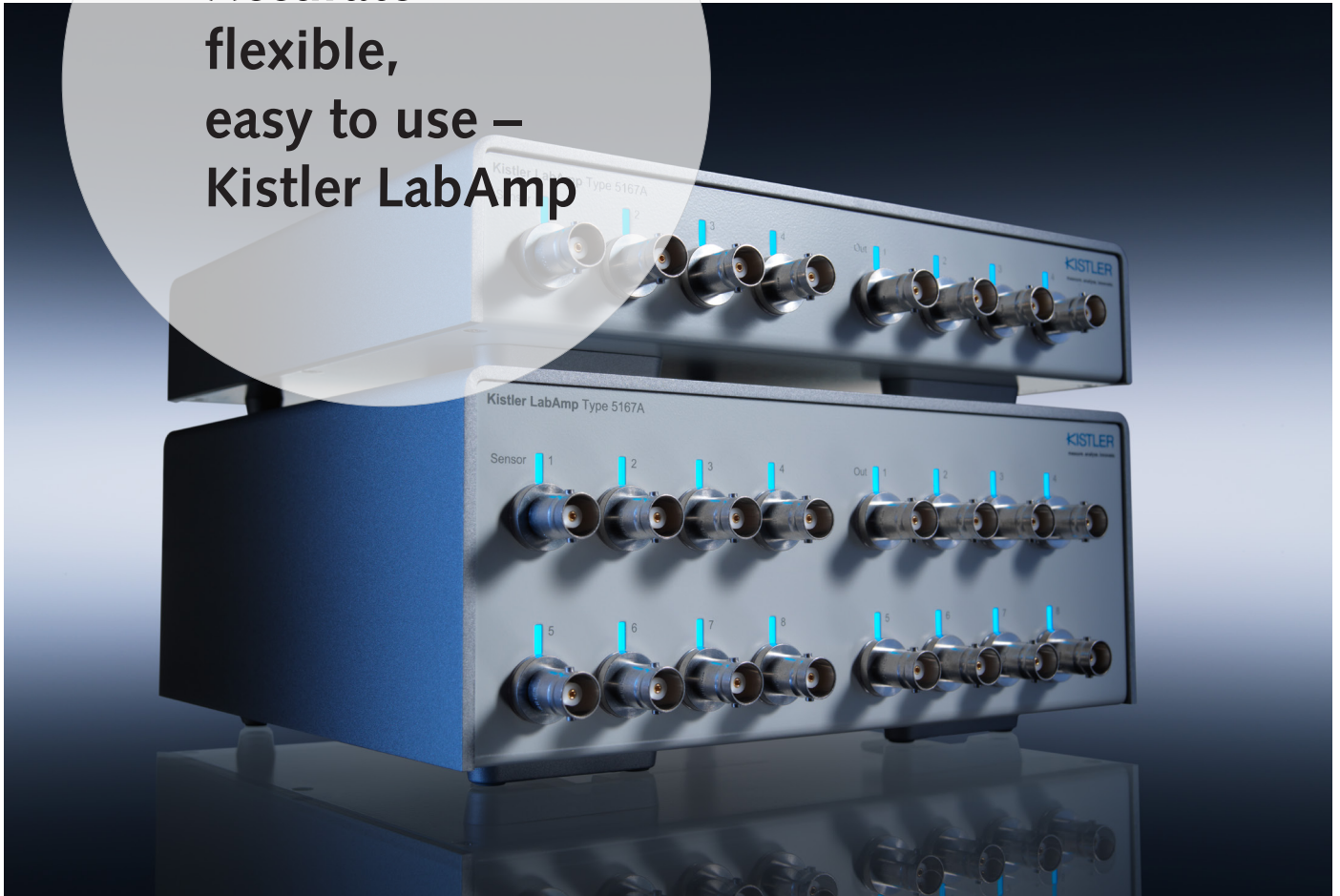


**Accurate  
flexible,  
easy to use –  
Kistler LabAmp**



## Laboratory charge amplifiers with integrated data acquisition

The Kistler LabAmp® 5165A and 5167A are universal laboratory charge amplifiers for measurement of force, acceleration, pressure, reaction torque and strain using piezoelectric sensors. The dual-mode charge amplifier 5165A measures dynamic PE and IEPE signals as well as static/dynamic voltage signals where the 5167A measures both quasi-static and dynamic signals from any piezoelectric sensor.

The Kistler LabAmp provides low-noise measurements with flexible signal conditioning as well as powerful data acquisition with high fidelity data directly to a host computer for further analysis.

Multiple LabAmp charge amplifiers can be connected and synchronized without any additional wires. For example, digitized quasi-static forces from a piezoelectric dynamometer can be simultaneously measured with dynamic IEPE accelerometers.

Apart from a simple data download directly out of the web user interface, use Kistler's DynoWare or the Multi-device client SW to acquire data. For the integration into your own software tool, an application programming interface and a virtual instrument driver for LabVIEW™ is available.

# Your benefits at a glance

## High signal quality

- Low noise
- 24bit A/D conversion
- Very flexible filter section
- High sample rates selectable

## Versatility

- 5165A: Universal inputs (charge, IEPE, voltage)
- Wide application range (frequency & charge range)
- Analog or digital use
- Fully flexible analog output scaling
- Virtual channels for real-time calculations
- Scalable to high channel counts



## Simple & quick setup

- No separate data acquisition device needed
- Intuitive user interface
- Up-to-date communication interface
- Simple wiring thanks to integrated Ethernet Switch

## LabAmp application examples

- Multi-component force & torque measurements
- Wheel force measurements in tire test stands
- Vibration testing
- Modal analysis
- Pressure pulsation measurements
- Many more...



Type	Key characteristics	Use with
5167A... 	<b>Quasi-static &amp; Dynamic Charge Amplifier</b> <ul style="list-style-type: none"> <li>• 4 or 8 inputs, BNC connectors</li> <li>• (special versions available for PE dynamometers)</li> <li>• 4 or 8 analog outputs, BNC connectors</li> <li>• Up to 100 kSps per channel</li> <li>• <math>\approx 0 \dots 45</math> kHz analog bandwidth</li> <li>• Charge ranges <math>\pm 100 \dots \pm 1\,000\,000</math> pC</li> <li>• Digital inputs for Reset/Measure and Trigger</li> <li>• Low-pass, High-pass &amp; notch filters</li> <li>• Time constants "Long" &amp; "Short"</li> </ul>	<ul style="list-style-type: none"> <li>• Piezoelectric force, strain and reaction torque sensors</li> <li>• Piezoelectric pressure sensors</li> <li>• Piezoelectric accelerometers</li> </ul>
5165A... 	<b>Dynamic Dual-Mode Charge Amplifier</b> <ul style="list-style-type: none"> <li>• 1 or 4 universal inputs, BNC connectors</li> <li>• 1 or 4 analog outputs, BNC connectors</li> <li>• Up to 200 kSps per channel</li> <li>• <math>0^* / 0.1</math> Hz ... 100 kHz analog bandwidth</li> <li>• Charge ranges <math>\pm 100 \dots \pm 1\,000\,000</math> pC</li> <li>• Voltage ranges <math>\pm 1 \dots \pm 10</math> V</li> <li>• TEDS (IEEE 1541.4) for IEPE sensors</li> <li>• 4 / 10 mA IEPE supply current</li> <li>• Low-pass, High-pass &amp; notch filters</li> </ul>	<ul style="list-style-type: none"> <li>• Piezoelectric and IEPE accelerometers</li> <li>• Piezoelectric and IEPE pressure sensors</li> <li>• Piezoelectric and IEPE force, strain and reaction torque sensors</li> <li>• Voltage signals</li> </ul>

\* voltage signals

## Kistler Group

Eulachstrasse 22  
8408 Winterthur  
Switzerland  
Tel. +41 52 224 11 11

Kistler Group includes the Kistler Holding AG and all its subsidiaries in Europe, Asia, Americas and Australia.

Find your local contact on  
[www.kistler.com](http://www.kistler.com)

**KISTLER**  
measure. analyze. innovate.