

## Press release

### **Making airbag and seatbelt tests more reliable and efficient**

The KiTimer 2.0 from Kistler: extended functionality and compact design

**The Kistler Group – known for its complete range of measurement technology for passive vehicle safety – is unveiling a fully remodeled system component for airbag and seatbelt system tests. The new KiTimer 2.0 is more compact, lighter, safer and even more reliable than its predecessors – and it comes equipped with an attractive series of additional features.**

Crash tests help to improve vehicle safety – and as requirements change over time, the tests themselves continue to evolve. Among the key elements in these procedures are tests on vehicle components that enhance passive safety. For example, more and more airbags are being installed in the latest vehicles, and seatbelt pretensioners have become equally indispensable: these devices are also triggered pyrotechnically and in the event of a collision, they must ensure that the required protective function is performed within fractions of a second.

As a leading system provider for passive vehicle safety, the Kistler Group is constantly working to expand its portfolio in this segment: the offering includes the advanced THOR dummy, integrated sensors and corresponding instrumentation with in-vehicle measurement technology, and load cell walls for crash tests with various geometries. Customers across the globe benefit from a complete system of intercoordinated components, all available from one single source.

#### **More functionality in less space**

The new KiTimer 2.0 is a DC pulse generator with 16 channels, so it can function simultaneously as a measuring instrument for pyrotechnically triggered vehicle components such as airbag and seatbelt systems. As the replacement for older predecessor products, the KiTimer 2.0 offers a host of new features developed in response to customers' requirements. Advantages for users include:

- Robust, compact design: size and weight are significantly reduced
- Ignition sequences are recorded for each channel, including ignition current and voltage
- Parameters for ignition can be set flexibly across a wide range
- Dual safeguarding via a connector on the device or via software, according to choice
- Additional event channels to trigger individual igniters independently of SR/T0

## Precise measurements and multiple protection

The built-in recorder captures the current and voltage profiles for each connected airbag or seatbelt pretensioner, with a sampling rate of 100 kHz and 16-bit resolution. On the KiTimer 2.0 itself, there is an additional RDY-LED for each channel to indicate whether the measured resistance of the connected igniter is within the defined range (choice of two-, three- or four-wire measurement). The KiTimer 2.0 is equipped with a CrashLink2 bus and two event channels so that triggers can be set independently of SR/T0. All settings on the KiTimer 2.0 can be performed comfortably and efficiently using CrashDesigner – the software from Kistler that is already well established on the market.

## Plug-in module for stationary laboratory system: now under development

As well as the crashproof solution for in-vehicle use, Kistler is developing an additional version of the new product in the form of a plug-in card for the KiDAU Stationary laboratory measurement system. Customers will then be able to use KiTimer 2.0 as part of a universal laboratory data acquisition system that combines various technologies, including measurements with analog or digital (DTI) sensors. The market launch of this additional version is expected at the end of 2021.

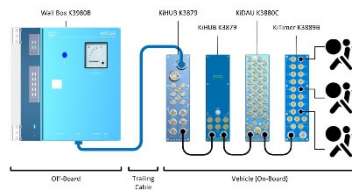
## Image material (please name the Kistler Group as picture source)



Kistler supplies comprehensive measurement technology solutions for crash tests and in-vehicle passive safety systems such as airbags.



The new KiTimer 2.0 from Kistler for airbag and seatbelt tests is more compact, safer and more reliable than its predecessors – and it also features a substantially expanded functional scope.



The new KiTimer 2.0 (extreme right) for airbag and seatbelt tests fits seamlessly into the system architecture of intercoordinated crash test solutions offered by Kistler.

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## About the Kistler Group

Kistler is the global market leader for dynamic pressure, force, torque and acceleration measurement technology. Cutting-edge technologies provide the basis for Kistler's modular solutions. Customers in industry and scientific research benefit from Kistler's experience as a development partner, enabling them to optimize their products and processes so as to secure sustainable competitive edge. Unique sensor technology from this owner-managed Swiss corporation helps to shape future innovations not only in automotive development and industrial automation but also in many newly emerging sectors. Drawing on our extensive application expertise, and always with an absolute commitment to quality, Kistler plays a key part in the ongoing development of the latest megatrends. The focus is on issues such as electrified drive technology, autonomous driving, emission reduction and Industry 4.0. Some 2,050 employees at more than 60 facilities across the globe are dedicated to the development of new solutions, and they offer application-specific services at the local level. Ever since it was founded in 1959, the Kistler Group has grown hand-in-hand with its customers and in 2020, it posted sales of CHF 361 million. About 9% of this figure is reinvested in research and technology – with the aim of delivering better results for every customer.