

	<p>HERO™ vibration controller incl. signal conditioners</p>	<h2>~ Typical DUTs</h2> <ul style="list-style-type: none"> • PE transducer • IEPE transducer • VC transducer • PR transducer • digital transducer with SPI, I2C, DTI, and many other interfaces
	<p>CS Q-LEAP™ software</p> <ul style="list-style-type: none"> • shock calibration • vibration measurement • vibration generation • more on demand 	
	<p>SE-201 shock exciter incl. control box and PR module for sensor character- ization of piezo-resitive sensors</p>	

★ Key features



Broad amplitude range $5 g_n \dots 10\,000 g_n$ ($49 \text{ m/s}^2 \dots 98 \text{ km/s}^2$)



Traceable to PTB (German National Metrology Laboratory)



Calibration of vibration sensors



Integrated sensor database



Integrated software for the generation of calibration certificates (print, PDF,...)
Easy data exchange with applications like ERP systems or measuring equipment databases



Broad amplitude range	5 g_n ... 10 000 g_n (49 m/s ² ... 98 km/s ²)
Pulse width	0.1 ms... 5 ms
Automated regulation of amplitudes	up to 600 g_n (6 km/s ²)
DUT weight, max.	80 g (2.82 oz)

Expanded uncertainty ¹⁾		
from	to	
5 g_n	20 g_n	< 2.0 %
> 20 g_n	200 g_n	< 1.5 %
> 200 g_n	4 000 g_n	< 1.8 %
> 4 000 g_n	10 000 g_n	< 3.0 %

1) Determined according to GUM (ISO Guide to the expression of uncertainty in measurement, 1995) with k = 2 (coverage factor)



Bridge power supply	4-lead or 6-lead configuration selectable, power will be measured and controlled
Voltage range	-10 V...0 V...+10 V
Current, max.	100 mA
Bridge completion	resistors for completing single-arm and two-arm partial bridges can be integrated in a connecting box (dimensioning according to specific sensor)
Shunt resistors	2 units can be integrated in a connecting box, resistance values can be stored in an EEPROM
Accuracy of shunt calibration for shunt resistors in the range of 40 kΩ to 320 kΩ	Measurement of the DC Voltage shift and calculation of the equivalent acceleration with an expanded measurement uncertainty of 1.0 % with a coverage factor of k = 2.
Amplifier	0 dB... 42 dB
Gain steps (DC)	factors to be set by software: 1, 2, 4, 8, 16, 32, 64, 128
Offset	offset measurement and offset compensation can be performed

