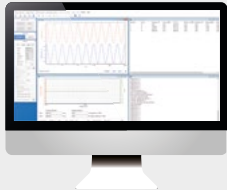


	<p>HERO™ data acquisition device incl. signal conditioners</p>
	<p>CS Q-LEAP™ software</p> <ul style="list-style-type: none"> <li>• shock calibration</li> <li>• more on demand</li> </ul>
	<p>SE-221 shock exciter</p>
	<p>Shock control unit for control via PC</p>



### Typical DUT

- PE accelerometer
- IEPE accelerometer
- PR accelerometer
- digital accelerometer with SPI, I2C, DTI, and many other interfaces



### Standards

- ISO 16063 - 22: Shock calibration by comparison to a reference transducer
- ISO 17025: General requirements for the competence of testing and calibration laboratories



### Key features



Shock amplitudes up to 100 000  $g_n$  (981 km/s<sup>2</sup>)



HERO™ traceable to PTB (German National Metrology Laboratory)



Calibration of shock accelerometers



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



<b>Broad amplitude range</b>	1000 $g_n$ ... 100 000 $g_n$ (9.8 km/s <sup>2</sup> ... 981 km/s <sup>2</sup> )	
<b>Pulse width<sup>1)</sup></b>	typical 23 $\mu$ s ... 19 $\mu$ s	
<b>DUT weight, max.</b>	30 g (1.06 oz)	
<b>Measurement uncertainty of shock-transfer-coefficient <math>S_{SH}</math><sup>2)3)</sup></b>	1 000 $g_n$ ... 20 000 $g_n$ (9.8 km/s <sup>2</sup> ... 196 km/s <sup>2</sup> )	3.0 %
	20 000 $g_n$ ... 50 000 $g_n$ (196 km/s <sup>2</sup> ... 490 km/s <sup>2</sup> )	4.0 %
	50 000 $g_n$ ... 100 000 $g_n$ (490 km/s <sup>2</sup> ... 981 km/s <sup>2</sup> )	5.0 %

<b>Air supply</b>	4 bar	air quality according to ISO 8573.1, Class 3
<b>Dimensions hopkinson bar</b>	Length	approx. 3.5 m (137 in)
	Height	0.8 m ... 1.2 m (32 in ... 47 in)
	Width	approx. 1.0 m (39 in)

1) The pulse duration depends on the damper material on the anvil and can change due to aging and wear. The values in the table are valid for new standard anvils delivered with the shock exciter.

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

3) Shock-transfer-coefficient is calculated in the time domain by comparing of peak values

