

## IIII SPEKTRA CS Q-LEAP™ SHOCK with SE-201

calibration system with shock exciter



HERO™ vibration controller incl. signal conditioners



CS Q-LEAP<sup>™</sup> software

- shock calibration
- more on demand



Shock control unit for control via PC



SE-201 shock exciter



## Typical DUTs

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



## **Standards**

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

www.spektra-dresden.com



## Key features



Broad amplitude range 5  $g_n$ ... 10 000  $g_n$  (49 m/s<sup>2</sup>... 98 km/s<sup>2</sup>)



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





**CS Q-LEAP™ SCHOCK with SE-201** 

Broad amplitude range	5 g <sub>n</sub> 10 000 g <sub>n</sub> (49 m/s <sup>2</sup> 98 km/s <sup>2</sup> )
Pulse width <sup>1)</sup>	0.1 ms5 ms
Automated regulation of amplitudes	up to $6000 g_n (60 \text{ km/s}^2)$
DUT weight, max.	80 g (2.82 oz)

Expanded uncertainty 2)			Shock-transfer-coefficient $S_{\rm SH}^{\ \ 3)}$	
Avil type	from	to	of analogue sensors	of digital sensors with DTI interface
Low shock (LS)	50 m/s² (5 g <sub>n</sub> )	2500 m/s² (250 g <sub>n</sub> )	1.0 %	1.2 %
Medium shock (MS)	2 km/s² (200 g <sub>n</sub> )	40 km/s² (4000 g <sub>n</sub> )	1.2 %	n.a.
	40 km/s² (4000 g <sub>n</sub> )	100 km/s² (10 000 g <sub>n</sub> )	2.0 %	n.a.

<sup>1)</sup> 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.

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

Accessories (optional)		
PR module	to support the calibration of piezoresistive sensors	
Data recorder DTI sensors	to support the calibration of DTI sensors with digital interface	

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