


	HERO™ vibration controller incl. signal conditioners
	CS Q-LEAP™ software <ul style="list-style-type: none"> • shock calibration • more on demand
	Shock control unit for control via PC
	SE-201 shock exciter



Typical DUT

- PE transducer
- IEPE transducer
- PR transducer
- digital transducer 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



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 shock 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



Technical data

CS Q-LEAP™ SHOCK with SE-201

Broad amplitude range	5 g_n ... 10 000 g_n (49 m/s ² ... 98 km/s ²)
Pulse width¹⁾	0.1 ms... 5 ms
Automated regulation of amplitudes	up to 6000 g_n (60 km/s ²)
DUT weight, max.	80 g (2.82 oz)

Expanded uncertainty ²⁾			Shock-transfer-coefficient S_{SH} ³⁾	
Anvil type	from	to	of analogue sensors	of digital sensors with DTI interface
Low shock (LS)	50 m/s ² (5 g_n)	2500 m/s ² (250 g_n)	1.0 %	1.2 %
Medium shock (MS)	2 km/s ² (200 g_n)	40 km/s ² (4000 g_n)	1.2 %	n.a.
	40 km/s ² (4000 g_n)	100 km/s ² (10 000 g_n)	2.0 %	n.a.

- 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 (JCGM 100 „Evaluation of measurement data - Guide to the expression of uncertainty in measurement“) with $k = 2$ (coverage factor) for the best possible device under test (DUT). Other devices that are not assumed as ideal must be evaluated with individual contributions.
- 3) 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

