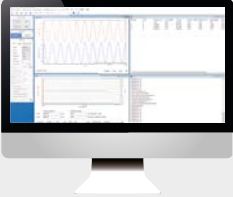
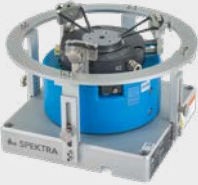
	<p>HERO™ vibration controller incl. signal conditioners</p>
	<p>CS Q-LEAP™ software</p> <ul style="list-style-type: none"> • sine calibration • sine sweep • vibration measurement • vibration generation • more on demand
	<p>SE-09 High frequency vibration exciter</p>
	<p>Power amplifier PA 500 DM</p>



Typical DUT

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



Standards

- ISO 16063 - 21: Calibration of vibration transducers by comparison to a reference transducer
- ISO 17025: General requirements for the competence of testing and calibration laboratories



Key features



Accelerometer calibration system for the frequency range 5 Hz ... 20 kHz
(... 50 kHz without traceability)



Traceable to PTB (German National Metrology Laboratory)



Calibration of vibration sensors, measurement systems and calibrators



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



Frequency range	5 Hz... 20 kHz (... 50 kHz without traceability)
Acceleration, max.	400 m/s ² (40 g _n) peak
Velocity, max.	0.5 m/s (19.7 inch/s)
Displacement, max.	7.5 mm (0.3 inch)
DUT weight, max.	350 g (12 oz)
Sensitivity of ref. accel.	1 mV / m/s ² (10 mV / g _n)

Frequency range		Max. recommended payload	Expanded measurement uncertainty ¹⁾ magnitude ²⁾ / phase ³⁾ of transfer coefficient
from	to		
5 Hz	< 10 Hz	200 g	1.0 % / 1.0°
10 Hz	< 20 Hz		0.7 % / 0.7°
20 Hz	1 000 Hz		0.5 % / 0.7°
> 1 000 Hz	5 000 Hz	50 g	0.7 % / 0.7°
> 5 000 Hz	10 000 Hz		1.5 % / 1.0°
> 10 000 Hz	15 000 Hz		2.0 % / 2.0°
> 15 000 Hz	20 000 Hz		3.0 % / 3.0°
Reference Frequencies: 80 Hz, 100 Hz, 160 Hz		200 g	0.5 % / 0.7°

Recommended excitation amplitudes	
Minimum	1.0 m/s ²
Maximum (high payload) ³⁾ (displacement, velocity, acceleration)	4 mm in the range 5 Hz ... 20 Hz (pk - pk) 0.3 mm/s in the range 20 Hz ... 53 Hz (peak) 100 m/s² in the range 53 Hz ... 40 kHz (peak)
Maximum (low payload) ⁴⁾ (displacement, velocity, acceleration)	4 mm in the range 5 Hz ... 20 Hz (pk - pk) 0.3 mm/s in the range 20 Hz ... 106 Hz (peak) 200 m/s² in the range 106 Hz ... 20 kHz (peak)

1) 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.

2) Valid for electrical sensor signals ≥ (1 mV or 1 pC)

3) Maximum vibration amplitude for maximum payload (DUT)

4) Maximum vibration amplitude without any payload (DUT)

