


	<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-10 medium frequency vibration exciter incl. power amplifier PA 14-180</p>



Typical DUTs

- 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 3 Hz...10 kHz



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



Force rating¹⁾ , max. (sine peak)	100 N (22.49 lbf)
Frequency range	3 Hz...10 kHz
Acceleration, max.	600 m/s ² (61 g _n) peak
Velocity, max.	1.5 m/s (59 inch/s)
Stroke²⁾, max.	10 mm (0.39 inch)
DUT weight, max.	500 g

1) Interval mode of operation

2) Recommended operation range; mechanical stops at 12 mm (0.47 in)

Frequency range		Max. recommended payload	Expanded measurement uncertainty ²⁾ amount ³⁾ / phase ¹⁾
from	to		
3 Hz	< 5 Hz	500 g	2.0 % / 2.0°
5 Hz	< 10 Hz		1.5 % / 1.5°
10 Hz	< 20 Hz		1.0 % / 0.7°
20 Hz	1 000 Hz		0.7 % / 0.7°
> 1 000 Hz	5 000 Hz	250 g	1.5 % / 1.5°
> 5 000 Hz	10 000 Hz	50 g	2.5 % / 2.0°
Reference Frequencies: 80 Hz, 100 Hz, 160 Hz		500 g	0.5 % / 0.7°

Recommended excitation amplitudes (peak values)

Minimum	1.0 m/s ²
Maximum (high payload)⁴⁾ (displacement, velocity, acceleration)	5 mm in the range 3 Hz... 12.5 Hz 0.4 m/s in the range 12.5 Hz... 48 Hz 120 m/s² in the range 48 Hz... 1 kHz 190 m/s² in the range 1 kHz... 5 kHz 350 m/s² in the range 5 kHz... 10 kHz
Maximum (low payload)⁵⁾ (displacement, velocity, acceleration)	5 mm in the range 3 Hz... 12.5 Hz 0.4 m/s in the range 12.5 Hz... 2008 Hz 500 m/s² in the range 200 Hz... 10 kHz

1) Requires software option for phase response measurements

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

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

4) Maximum acceleration for maximum payload (DUT)

5) Maximum acceleration without any payload

