


	<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>APS 129 air bearing vibration exciter</p>
	<p>Power amplifier PA 500 DM</p>



Typical DUT

- heavy seismic sensor (seismometer)
- seismic simulation for components
- geophone for structure/building vibration measurement



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
- DIN 45669: Sensors for measurement of vibration immission



Key features



Frequency range DC...200 Hz



Traceable to PTB (German National Metrology Laboratory)



Calibration of vibration sensors, seismic sensors and geophones



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	DC ... 200 Hz
Stroke (peak-peak)	158 mm (6.25 inch)
Force (sine peak)	133 N (30 lbf)
Operation	horizontal or vertical
Payload, max.	horizontal: 23.0 kg (50.7 lb) vertical: 11.0 kg (24.3 lb)
Table size	254 × 254 mm (10 × 10 inch)

Frequency range		Max. recommended payload	Expanded measurement uncertainty ¹⁾ magnitude ²⁾ / phase ³⁾ of transfer coefficient
from	to		
0.2 Hz	< 1 Hz	23 kg	1.5 % / 1.5°
1 Hz	16 Hz		1.0 % / 1.0°
> 16 Hz	160 Hz	20 kg	2.0 % / 2.0°
Reference frequencies: 8 Hz or 16 Hz for calibration according to DIN 45669			1.0 % / 1.0°

Recommended excitation amplitudes (peak values)	
Minimum	0.2 Hz ... 160 Hz: 0.01 m/s²
Maximum (high payload) ⁴⁾ (displacement, velocity, acceleration)	50 mm in the range of 0.2 Hz ... 1.25 Hz 3 m/s² in the range of 1.25 Hz ... 25 Hz 3 m/s² ... 4 m/s² in the range of 25 Hz ... 160 Hz
Maximum (low payload) ⁵⁾ (displacement, velocity, acceleration)	50 mm in the range of 0.2 Hz ... 1.25 Hz 0.4 m/s in the range of 1.25 Hz ... 6 Hz 15 m/s² in the range of 6 Hz ... 25 Hz 15 m/s² ... 2 m/s² in the range of 25 Hz ... 160 Hz

- 1) Only in combination with optional extra PHASE
- 2) Determined according to GUM (ISO Guide to the expression of uncertainty in measurement, 1995) with $k = 2$ (coverage factor) for the best possible DUT (other devices that are not as ideal have to be evaluated with individual additions)
- 3) Values only valid for electrical sensor signals \geq (1 mV or 1 pC)
- 4) Maximum acceleration for maximum payload (DUT)
- 5) Maximum acceleration without any payload (DUT)

