

# PORTABLE VIBRATION CALIBRATOR

**GENERAL**

Frequency Range (operating, 100 gram payload)	7 Hz-10 kHz	420 – 600,000 CPM
Maximum Amplitude (100 Hz, no payload)	20 g pk 15 in/s pk 50 mils pk-pk	196 m/s <sup>2</sup> pk 380 mm/s pk 1.27 mm pk-pk
Maximum Payload <sup>[1]</sup>	800 gram	

**ACCURACY OF READOUT (MEASURED WITH 10 GRAM QUARTZ REFERENCE ACCELEROMETER)**

Acceleration (30 Hz to 2 kHz)	±3%
Acceleration (7 Hz to 10 kHz)	±1 dB
Velocity (10 Hz to 1000 Hz)	±3%
Displacement (30 Hz to 150 Hz)	±3%
Amplitude Linearity (100 gram payload, 100 Hz)	< 1% up to 10 g pk
Waveform Distortion (100 gram payload, 30 Hz to 2 kHz)	< 5% THD (typical) up to 5 g pk

**UNITS OF READOUT**

Acceleration (peak/RMS)	g	or	m/s <sup>2</sup>
Velocity (peak/RMS)	in/s		mm/s
Displacement (peak to peak)	mils		µm
Frequency	Hz		CPM
Test Sensor Sensitivity	mV/EU <sup>[2]</sup>		

**INPUT/OUTPUT**

Test Sensor In	Voltage or ICP <sup>®</sup> <sup>[3]</sup>
Bias Fault Indication (ICP <sup>®</sup> Sensors)	Yes
External Source In (Max)	1V AC RMS
Monitor Reference Out	10 mV/g (nominal), Buffered internal reference output

**MEMORY**

Storage	Up to 500 calibration records
Points Per Record	30 calibration data points
Sensor Information	Model number, serial number, Mounting orientation (x, y, z), user notes
USB Port	Export to flash drive (FAT 32)
Export File Format	CSV (comma-separated values)

**PHYSICAL**

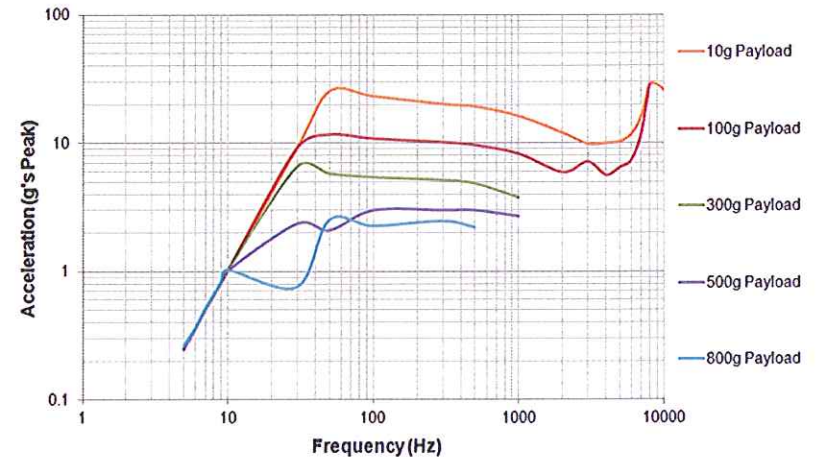
Dimensions (H x W x D)	8.5 x 12 x 10 in	22 x 30.5 x 28 cm
Weight	18 lbs	8.2 kg
Sensor Mounting Platform Thread Size	¼-28	
Operating Temperature	32°F-122°F	0°-50°C

All specifications are at room temperature unless otherwise specified.

ICP<sup>®</sup> is a registered trademark of PCB Piezotronics, Inc.

In the interest of constant product improvement, specifications may change without notice.

**Maximum Acceleration VS. Frequency**



**POWER REQUIREMENTS**

Internal Battery (sealed gel lead acid)	12 VDC, 4 amp hours
AC Power (for recharging battery)	110-240 Volts, 50-60 Hz
Operating Battery Life <sup>[4]</sup>	
100 gram payload, 100 Hz, 1 g pk	18 hours
100 gram payload, 100 Hz, 10 g pk	1 hour

**ACCESSORY POUCH INCLUDES**

- PD-1320-01: Mounting Wrench
- 9100-PS01: Power Supply and Plug Adaptors
- 081B20: ¼-28 to ¼-28 Adaptor
- 081A08: 10-32 to ¼-28 Adaptor
- 080A118: Mounting Pad
- 9110-USB: USB Flash Drive with Calibration Report Generation Worksheet

**NOTES**

- [1] Operating range reduced at higher payloads. Reference manual for full details.
- [2] EU can be [g], [m/s<sup>2</sup>], [in/s], [mm/s], [mils] or [µm].
- [3] 5mA constant current excitation to ICP<sup>®</sup> (IEPE) sensor.
- [4] As shipped from factory in new condition.

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