

Model Number

9110D

PORTABLE VIBRATION CALIBRATOR

Revision: D

ECN #:

GENERAL

Frequency Range (operating, 100 gram payload)	7 Hz-10 kHz	420 – 600,000 CPM
Maximum Amplitude (100 Hz, no payload)	20 g pk	196 m/s ² pk
	15 in/s pk	380 mm/s pk
	50 mils pk-pk	1.27 mm pk-pk
Maximum Payload ^[1]	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 ²
Velocity (peak/RMS)	in/s		mm/s
Displacement (peak to peak)	mils		µm
Frequency	Hz		CPM
Test Sensor Sensitivity	mV/EU ^[2]		

INPUT/OUTPUT

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

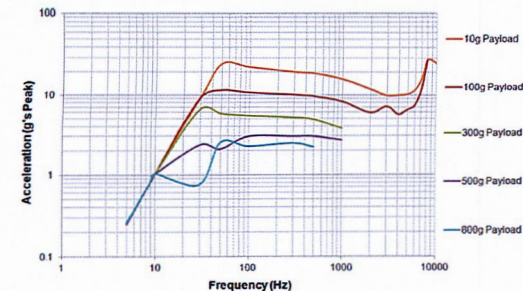
MEMORY

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 °C – 50 °C

Maximum Acceleration VS. Frequency



Firmware Options^[4]

9100-LF5: 5 Hz (300 CPM) Low Frequency Operation	5 Hz – 10 kHz, 300 – 600,000 CPM
Frequency Range (operating, 100 gram payload)	5 Hz – 10 kHz, 300 – 600,000 CPM
Acceleration Accuracy (5 Hz to 10 kHz)	± 1 dB
9110-CALROUTE: Semi-automation & pass/fail notification	
9110-MC: Modulated current sensors power supply & measurement	
Test Sensor Sensitivity Units of Readout	mV/EU or mA/EU or µA/EU ^[2]
Test Sensor Input/Output	Voltage, ICP ^[3] or Modulated Current
Included Accessory	Model 9100-PS02 USB to +24 VDC power supply

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 ^[5]	
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

SUPPLIED ACESORIES

9100-CAL01: NIST traceable Certificate of Calibration, Metric & English Units, Accredited to ISO 17025 by A2LA

NOTES

- [1] Operating range reduced at higher payloads. Reference manual for full details.
- [2] EU can be [g], [m/s²], [in/s], [mm/s], [mils] or [µm].
- [3] 5 mA constant current excitation to ICP[®] (IEPE) sensor.
- [4] Versions with optional firmware have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.
- [5] As shipped from factory in new condition.

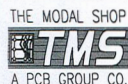
All specifications are at room temperature unless otherwise specified.

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



Project Engineer: <i>[Signature]</i>	Product Manager: <i>[Signature]</i>	Mkt Team Leader: <i>[Signature]</i>	Spec Number: PS-0102
Date: <i>5 May 16</i>	Date: <i>5 May 16</i>	Date: <i>5 MAY 16</i>	



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