

Model Number

9000A

# SMARTSINE™ CALIBRATION DRIVER

Revision: A

ECN#:

## INPUT/OUTPUT

Test Sensor In	
Sensor Type	Voltage or ICP® (IEPE) <sup>[1]</sup>
Input Voltage (Max)	5 V pk <sup>[2]</sup>
Reference Sensor In	
Sensor Type	ICP (IEPE) <sup>[1]</sup> ONLY
Input Voltage (Max)	1 V pk <sup>[2]</sup>
Reference Sensitivity	Single point or curve (up to 60 points)
Bias Fault Indication (ICP Sensors)	Yes
Source Out	Sine wave form of 1 V pk amplitude Max <sup>[3]</sup>
Monitor Reference Out	Buffered reference output
Electrical Connector (Input/Output)	BNC Jack

## GENERAL

Operating Range <sup>[4]</sup>	0.5 Hz–20 kHz (30–1200k CPM)
ADC Resolution	16-bit

### Maximum Testing Amplitudes

Ref Sensitivity (mV/g)	Vibration					
	g pk	in/s pk	mils pk-pk	m/s <sup>2</sup>	mm/s pk	µm pk-pk
10	100	61.45	195.59	981	1561	4968
100	10	6.14	19.56	98	156	497

Ref Sensitivity (mV/Pa)	Sound Pressure Level dB <sup>[5]</sup>
12.5	130
50	115

## UNITS OF READOUT

Acceleration (pk or RMS)	[g], [m/s <sup>2</sup> ]
Velocity (pk or RMS)	[in/s], [mm/s]
Displacement (pk to pk)	[mils], [µm]
Sound Pressure Level <sup>[5]</sup>	[dB]
Frequency	Hz (CPM)
Test Sensor Sensitivity	mV/EU <sup>[6]</sup>
Shaker Displacement Limit Setting (Max) <sup>[7]</sup>	10 in pk-pk (254 mm pk-pk)

## DATA MANAGEMENT

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

## POWER REQUIREMENTS

AC Power (for recharging battery)	110–240 V, 50–60 Hz
Input Power Rating from Charger	18 VDC, 1 A
Internal Battery (Li-ion)	11.1 VDC, 2200 mAh
Operating Battery Life <sup>[8]</sup>	16 hours

## PHYSICAL

Dimensions (H x W x D)	4.7 x 9.8 x 11.8 in (12 x 25 x 30 cm)
Weight	7.8 lb (3.56 kg)
Operating Temperature	32 °F to 122 °F (0 °C to 50 °C)

## SUPPLIED ACCESSORIES

Accessory Pouch Containing:  
 USB Flash Drive with Calibration Report Generation Worksheet  
 Universal Power Supply (Power Charger) with Interchangeable Plug Adaptors

### NOTES:

- [1] 5 mA constant current excitation to ICP (IEPE) reference sensor
- [2] Recommended SUT voltage > 20 mV pk; REF voltage > 4 mV pk
- [3] 50 Ω output impedance
- [4] Or limited to frequency range of reference sensitivity curve input
- [5] Reference 20 µPa
- [6] EU: [g], [m/s<sup>2</sup>], [in/s], [mm/s], [mils], [µm], or [Pa] for acoustics
- [7] Actual maximum amplitude may be limited by exciter specifications and amplifier gain
- [8] As shipped from factory in new condition

All specifications are at room temperature unless otherwise specified.  
 ICP is a registered trademark of PCB Piezotronics, Inc.  
 In the interest of constant product improvement, specifications may change without notice.



Project Engineer:

LJB

Product Manager:

MAR

SAM Team Leader:

CTD

Spec Number:

PS-0119

Date: 09-19-19

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Date: 9/19/19

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SAM-F020 revB 05/17/18

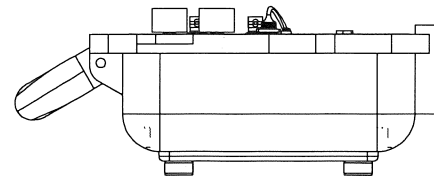
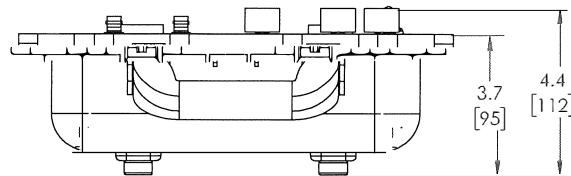
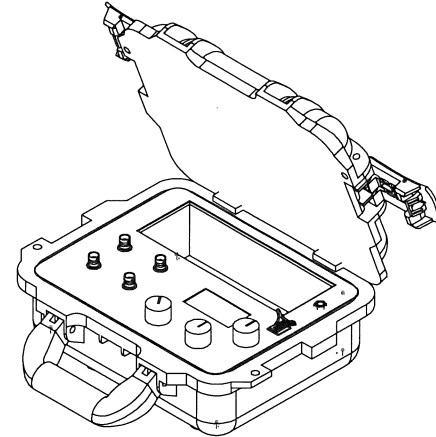
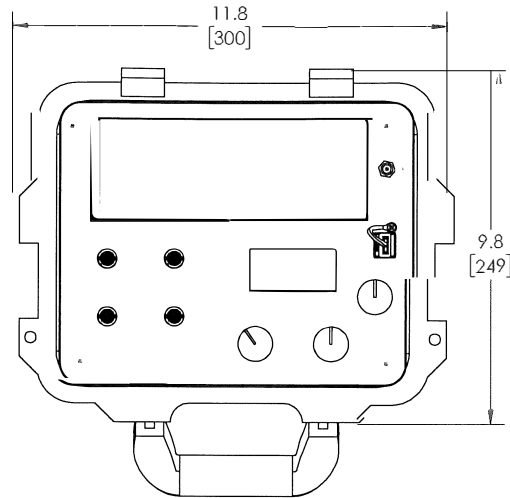
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Dimensions in inches [mm]

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