



# Class 1 Sound Level Meter

## with Excel-Formatted Data Logging SD Card

**Accurately Measures Sound Levels of Machinery  
or an Environment with 0.1 dB Resolution**



No. DSM403SD

### Applications:

- Acoustics design
- Sound system setup
- OSHA compliance



Acoustics Design



Sound System Setup

This instrument's unique feature is its patented technique for storing sampled data in Excel format on removable SD memory cards



	A1				
	Place	Date	Time	Value	Unit
1	1	2009/10/16	16:47:05	60.8	dB
2	2	2009/10/16	16:47:07	66.9	dB
3	3	2009/10/16	16:47:09	68.8	dB
4	4	2009/10/16	16:47:11	71	dB
5	5	2009/10/16	16:47:13	82.3	dB
6	6	2009/10/16	16:47:15	92.3	dB
7	7	2009/10/16	16:47:17	93.1	dB
8	8	2009/10/16	16:47:19	93.1	dB
9	9	2009/10/16	16:47:21	89.8	dB
10	10	2009/10/16	16:47:23	90.2	dB





# Class 1 Sound Level Meter with Excel-Formatted Data Logging SD Card

## Features:

- Measures sound levels of machinery or an environment
- Big (2.5 in. diagonal) front-panel green backlit LCD is easy to read
- Makes measurements in auto ranging mode or within a manually settable range
- Displays maximum and minimum readings and holds any reading
- Performs automatic data logging at sampling time settable from 1 second to 9 hours
- Also supports manual logging and changing of card storage location
- Auto power off function

## Included Accessories:

- Hard carrying case
- Sound wind shield ball
- 2 GB SD memory card
- User's manual

## Optional Accessories:

- 9VDC adapter for 110V power supply (General P/N AC1)
- SDRD1 - SD Card Reader



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## Specifications:

**Embedded Microcontroller:** Custom one-chip LSI device

**Display Type:** LCD with green backlight

**Display Size:** 2.05 x 1.5 in. (52 x 38mm)

**Parameter Measured:** dB

**Frequency Range:** 31.5 Hz to 16 kHz

### Measurement Range:

- 30 to 130 dB in auto ranging mode
- User can also select fixed range of 30 to 80 dB, 50 to 100 dB, or 80 to 130 dB

### Measurement Weighting:

- By frequency: using Class I IEC 61672 standard; frequency weighing uses "A" or "C" standard
- By time: using Class 1 IEC 61672 standard; time weighting is fast or slow (200 ms or 500 ms response time)

### Measurement Accuracy:

- With "A" frequency weighting:  $\pm 2.0$  dB @ 31.5 Hz, 1.5 dB @ 63 Hz, 1.5 dB @ 125 Hz, 1.4 dB @ 250 Hz, 1.4 dB @ 500 Hz, 1.1 dB @ 1 kHz, 1.6 dB @ 2 kHz, 1.6 dB @ 4 kHz, +2.1 dB and -3.1 dB @ 8 kHz; +3.0 dB and -6.0 dB @ 12.5 kHz, +3.5 dB and -17.0 dB @ 16 kHz

**Measurement Resolution:** 0.1 dB

**Data Logging Sampling Time:** 1 second to 1 hour

**Settable Parameters:** Date, time, auto power off, beep sound, sampling time, decimal point or comma decimal division, "A" or "C" frequency weighting, fast or slow time weighting

**Storable/Recallable Readings:** Maximum, minimum

**SD Card Capacity:** 1 GB to 16 GB

**Operating Temperature:** 32° to 122°F (0° to 50°C)

**Operating Relative Humidity:** 0 to 85%

### Power Consumption:

- 8 mADC (normal operation, with backlight off and SD card not saving data)
- 14 mADC with backlight on and card saving data
- 44 mADC with backlight on and card saving data

### Dimensions of Meter:

9.65 x 2.68 x 1.77 in. (245 x 68 x 45mm)

**Weight of Meter:** 1.08 lb. (489g)

### Power Source:

Six "AA" batteries or optional 9-VDC AC adapter

