

# 5500 PORTABLE VIBRATION METER

## Datasheet

### OVERVIEW

Monitor vibration with this compact and simple to operate vibration meter. This intrinsically safe meter is ideal for obtaining spot measurements of machine vibration. After pressing the ON button to activate the unit, a vibration reading is then obtained by simply holding the probe tip against the machine and observing the reading on the LCD indicator. Comparisons to a vibration severity chart indicate acceptance conditions.

This economical vibration meter is available with English or metric units. Pressing and holding the ON button will “freeze” the vibration reading such that the unit can be removed from the test point without losing the reading. Releasing the button returns the unit to normal operation.

Power is supplied by a standard 9V battery. A symbol appears on the LCD indicator when the battery is low. The instrument housing is made of high impact polymer. A carrying case with belt loop and battery are included. Optional accessories include a 10” probe extension for difficult to reach areas and for measuring the vibration of exposed shafts.

### FEATURES

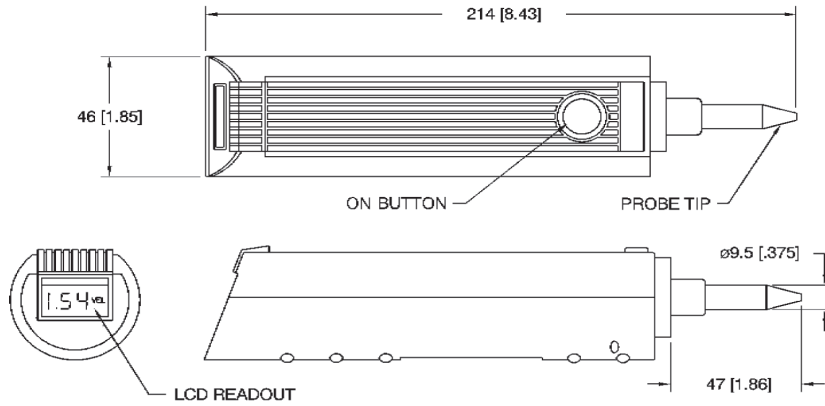
- Accurate, piezo-electric accelerometer sensor
- Quick vibration readings
- Includes reading “hold” feature
- Auto power off extends battery life
- Alkaline 9V battery included
- Model 5500 is intrinsically safe for use in hazardous areas
- True RMS velocity response



### SPECIFICATIONS

<b>Measurands</b>	Velocity units
<b>Frequency Response</b>	10 to 1000 Hz
<b>Accuracy</b>	5% of full scale range
<b>Repeatability</b>	2%
<b>Operating Temperature</b>	-10°C to +70°C (+14°F to +158°F)
<b>Hazardous Area Certification</b>	ATEX intrinsically safe certified, Ex ia IIC T3 Ga
<b>Power</b>	Alkaline 9V Dry Cell
<b>Vibration Ranges</b>	See Ordering Information

## WEIGHT & DIMENSIONS



**Weight:**  
**Meter w/ Case = 1.2 Kg [2.50 lbs.]**

**Dimensions in mm [inches]**

## APPLICATION NOTE

### RMS vs. PEAK Velocity Readings

For velocity vibration readings, the 5500 vibration meter uses a true RMS detector. The meter can also be ordered with readings in derived peak units (derived peak = RMS x 1.414).

Most North American vibration level acceptance charts and permanent vibration instruments show velocity severity in true peak units.\*

Most European vibration level acceptance charts and permanent vibration instruments show velocity severity in true RMS units.

#### NOTE:

\* Derived peak and true peak will differ for complex vibration signals, but will agree for vibration signals consisting of a single frequency.

## ORDERING INFORMATION

5500 PORTABLE VIBRATION METER			
5500 - A A A			
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A			Velocity Range
	0	0	1 2.00 inches/sec, peak*
	0	0	2 2.00 inches/sec, RMS
	0	0	3 50.0 mm/sec, peak*
	0	0	4 50.0 mm/sec, RMS

## ACCESSORIES

### Model 2182 Probe Extension

254 mm (10") long extension slips on vibration meter probe for measurements in tight quarters.

