

## Portable Vibration Meter Kit VM110

### General information

The VM110 Vibration Meter is a portable battery powered instrument, it is ideal for most machine vibration applications and can form part of a more comprehensive system should this be required.

It is an excellent stand alone device to keep track of trends in Condition Monitoring situations and data can be recorded should this be required for later analysis.

The Hand held external sensor is required to provide a signal proportional to the acceleration value. Both RMS and Peak measurements can be made of Acceleration, Velocity and Displacement values.

The Kit is supplied complete with Hand Held Transducer, spike attachment, magnetic base for the transducer, (ideal for attaching to a machine directly), 2 x batteries and an attaché case.

### Key features

- Comprehensive ranges
- Ideal for Condition monitoring
- Recorder Outputs
- Digital Display
- Competitively priced
- Optional fixed Transducers & mountings
- Supplied with batteries & carrycase

Three decade ranges are provided for maximum resolution, together with a low pass filter for the reduction of wide band noise.

An AC output is provided via the D type output socket, this allows for the connection of filter sets, Fourier analysers etc., for further signal analysis and a DC output is provided for chart recorders.

### Measurement Ranges

Acceleration:	2 g, 20 g, 200 g
Velocity:	20 mm/sec, 200 mm/sec, 2000 mm/sec
Displacement:	20 $\leftrightarrow$ m, 200 $\leftrightarrow$ m, 2000 $\leftrightarrow$ m
Frequency Range	Upper Frequency, selectable low pass filters of 5kHz, 10kHz, 20kHz Lower Frequency, Acc 5Hz, Vel 10Hz, Dis 15Hz

Detector	Switch selectable: RMS or Peak
Accuracy (10 mV/g Input)	Figures are for the vibration meter only, as the input transducers will affect the overall system accuracy. All readings are +/-1 digit added to the following errors.
<b>NOTE: All reading error figures are for full-scale reading.</b>	
Acceleration:	1.5% RMS - 3% Peak,
Velocity:	2.5% RMS - 4% Peak,
Displacement:	3.5% RMS - 5% Peak (9% at 10kHz)
Equivalent Input Noise	The equivalent input noise is the lowest measurable signal in the range due to internally generated electrical noise.
	<b>RMS Noise    Peak Noise</b>
Acceleration:	2g range    2mg 6mg 20g range    2mg 6mg 200g range    20mg 60mg
Velocity:	0.1mm/sec    0.3mm/sec
Displacement:	0.2 $\leftrightarrow$ m    0.6 $\leftrightarrow$ m
Inputs:	Various accelerometers can be used in conjunction with the VM110. For more details contact the sales office.
Outputs	AC: Signal & range as measured & selected on front panel, 200mV RMS or Peak full range. DC: This is 200mV DC at full range as selected.
Power:	2 x PP3 type batteries. Battery low indicator on meter warns of low battery voltage. Battery life is approximately 15 hours dependant on battery type.

### The kit comprises of the following items:

- 1 pc VM110 Vibration Meter
- 1 pc Hand Held Probe
- 1 pc Spike Probe Adaptor
- 1 pc Magnetic Base Adaptor
- 1 pc 15 way D Connector
- 2 pc PP3 Batteries
- 1 pc Attaché case

### Additional information

A range of accessories & alternative transducers, cables & probes available on request



Order Codes	Description
VM110	Portable Vibration Meter