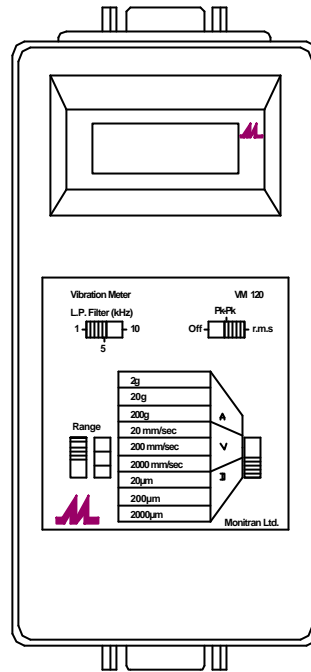
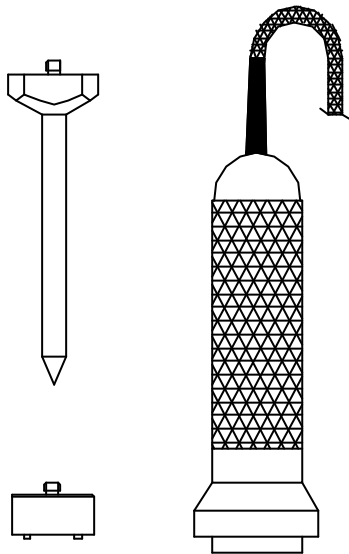




MTN/VM120

Hand Held Vibration Meter

- Multiple Measurements
- LCD Display
- AC or DC Outputs
- Carrying Case
- Battery Powered



Standard Vibration Meter, Probe & Accessories

The MTN/VM120 Vibration Meter is a battery powered portable instrument designed to operate with a constant current type accelerometer (10mV/g sensitivity) to make vibration measurements simple and convenient.

Both RMS and Peak-to-Peak detection of acceleration, velocity and displacement can be made in three ranges. (MTN/VM110 is peak detection)

A switched low pass filter for the reduction of wide band noise is provided, having lower cut-off frequencies than the MTN/VM110

An AC output via a 'D' type output socket allows the connection of additional filters or a signal analyser. A DC output is also provided to drive a chart recorder.

Standard Package

| ORDER CODE PART NO. | DESCRIPTION |
|-----------------------------|-------------------------|
| MTN/VM120 | VIBRATION METER |
| MTN/2100 | HAND HELD PROBE |
| MTN/MM001 | MAGNETIC BASE ADAPTER |
| MTN/PS001 | HAND HELD SPIKE ADAPTER |
| OTHER ACCESSORIES AVAILABLE | |

Technical Specification

| Measurement Ranges | Acceleration: 2g, 20g, 200g Velocity: 20mm/sec, 200mm/sec, 2000mm/sec Displacement: 20µm, 200µm, 2000µm | | | | | | | | | | | | | | | | | | |
|--------------------------|---|--------------------|------------------|--------------------|---------------|-----|------|-----------|-----|------|------------|------|-------|----------------|--|-----------|------------|--|-------|
| Frequency Range | Upper Frequency, selectable low pass filters of 1kHz, 5kHz, 10kHz Lower Frequency, Acc. 5Hz, Vel. 10Hz, Dis. 15Hz | | | | | | | | | | | | | | | | | | |
| Detector | Switch selectable: RMS or Peak-to-Peak | | | | | | | | | | | | | | | | | | |
| Display | 12.7mm, 3½digit LCD. 3 readings per second | | | | | | | | | | | | | | | | | | |
| Accuracy (10 mV/g Input) | Figures are for the VM120 only, since input transducers will affect the overall system accuracy. All readings are +/- 1 digit added to the following full scale errors. Acc. 1.5% RMS; 3% Pk-Pk; Vel. 2.5% RMS; 4% Pk-Pk; Dis. 3.5% RMS; 5% Pk-Pk. (9% at 10kHz) | | | | | | | | | | | | | | | | | | |
| Equivalent Input Noise | The equivalent input noise is the lowest measurable signal level in the range due to internally generated electrical noise. <table border="0" style="margin-left: 40px; margin-top: 10px;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>RMS Noise</u></th> <th style="text-align: center;"><u>Pk-Pk Noise</u></th> </tr> </thead> <tbody> <tr> <td>Acc: 2g range</td> <td style="text-align: center;">2mg</td> <td style="text-align: center;">12mg</td> </tr> <tr> <td> 20g range</td> <td style="text-align: center;">2mg</td> <td style="text-align: center;">12mg</td> </tr> <tr> <td> 200g range</td> <td style="text-align: center;">20mg</td> <td style="text-align: center;">120mg</td> </tr> <tr> <td>Vel: 0.1mm/sec</td> <td></td> <td style="text-align: center;">0.6mm/sec</td> </tr> <tr> <td>Dis: 0.2µm</td> <td></td> <td style="text-align: center;">1.2µm</td> </tr> </tbody> </table> | | <u>RMS Noise</u> | <u>Pk-Pk Noise</u> | Acc: 2g range | 2mg | 12mg | 20g range | 2mg | 12mg | 200g range | 20mg | 120mg | Vel: 0.1mm/sec | | 0.6mm/sec | Dis: 0.2µm | | 1.2µm |
| | <u>RMS Noise</u> | <u>Pk-Pk Noise</u> | | | | | | | | | | | | | | | | | |
| Acc: 2g range | 2mg | 12mg | | | | | | | | | | | | | | | | | |
| 20g range | 2mg | 12mg | | | | | | | | | | | | | | | | | |
| 200g range | 20mg | 120mg | | | | | | | | | | | | | | | | | |
| Vel: 0.1mm/sec | | 0.6mm/sec | | | | | | | | | | | | | | | | | |
| Dis: 0.2µm | | 1.2µm | | | | | | | | | | | | | | | | | |
| Inputs | Various accelerometers can be used in conjunction with the VM120. For more details contact the sales office. | | | | | | | | | | | | | | | | | | |
| Outputs | AC: 200mVac, full range as selected. DC: 200mVdc, full range as selected. | | | | | | | | | | | | | | | | | | |
| Power | 2 x PP3 9V batteries. Battery low warning indicator on display. Battery life is approximately 15 hours dependent on battery type. | | | | | | | | | | | | | | | | | | |