

### Fast, Easy Color-Qualifying of Machinery Vibration



Datamite Technologies introduces a simple way to measure vibration of rotating equipment. It's the **DataMite 2000**, a four-colour liquid crystal display meter that is hand-held, easy-to-use and weighs just 11 ounces (case included).

Specially designed to fit comfortably into the palm of your hand, the **DataMite 2000** qualifies vibration of rotating equipment to quickly determine machine serviceability. Personnel need not be acquainted with vibration analysis as the 2000 will show them **Green** for good, **Yellow** for questionable, and **Red** for equipment operating dangerously. Operators, electricians, mechanics or trainees with five minutes of safety and orientation can complete satisfactory surveys. With the samples in the analysis section of the manual, one

can do basic analysis almost immediately. The **DataMite 2000** is also an effective training tool when used to educate personnel in the basic techniques required for all vibration analysis.

#### The DataMite 2000 incorporates:

- **FOUR-COLOR LCD** – an easy-to-read 2 1/4" x 5/8" display indicates machinery vibration in units of velocity. A **Blue** section of the display has an "ON" symbol that appears advising that the unit is ready for measurement. When the battery voltage drops below a level required for accurate measurement, a blue battery symbol will appear.
- **ANALOG VOLTAGE OUTPUT** – gives the **DataMite 2000** the ability to interface with portable data terminals for fast and accurate recording of vibration readings for post collection analysis. This analog voltage also serves as a connection for the LCD readout accessory.
- **HARD PLASTIC CASE** – the non-slip finish makes the **DataMite 2000** rugged and easy-to-hold. The case is sealed and weather-resistant for dependable operation in varying environments and slips securely into a protective red case that can be attached to the supplied belt for easy portability.
- **AUTOMATIC RANGING** – begins when the only control, a power button, is pushed and held. The velocity measurement range is 0.1 to 1.0 in/sec peak.

RUGGED

EASY TO USE

DUAL DISPLAY

AUTO RANGING

INPUT  
AVERAGING

LEATHER  
HOLSTER

# DATAMITE 2000 SPECIFICATIONS

<b>Accelerometer</b>	Built-in compression type solid state piezoelectric vibration sensor (remote optional)												
<b>Velocity Range</b>	Color LCD Window Display: 0 – 1.0 "/sec RMS or Peak in six steps LCD Digital Display: 0 – 19.99"/sec RMS or Peak in 0.01" increments												
<b>Frequency Range</b>	10 – 1000 Hz, active filter design, conforms to ISO-2954												
<b>Measurement</b>	Rectification Characteristics: precision full wave rectified RMS displayed as velocity RMS or Peak, in English or Metric												
<b>Display</b>	8 segment colour LCD with 6 windows for velocity and 2 windows for instrument condition  Standard severity levels are set to turn on at: <table border="0" style="margin-left: 40px;"> <tr> <td>1<sup>st</sup> Green</td> <td>- 0.1</td> <td>4<sup>th</sup> Yel / Red</td> <td>- 0.4</td> </tr> <tr> <td>2<sup>nd</sup> Grn / Yel</td> <td>- 0.2</td> <td>5<sup>th</sup> Red</td> <td>- 0.5</td> </tr> <tr> <td>3<sup>rd</sup> Yellow</td> <td>- 0.3</td> <td>6<sup>th</sup> Red</td> <td>- 1.0</td> </tr> </table> <p style="margin-left: 40px;">All 6 windows flash when vibration is greater than 1.4 "/sec</p> <p style="margin-left: 40px;">Sampling Time: 3 measurements per second</p> <p style="margin-left: 40px;">Digital Accessories: Model 2050 - 3.5" Digital LCD, 0.32" character height</p>	1 <sup>st</sup> Green	- 0.1	4 <sup>th</sup> Yel / Red	- 0.4	2 <sup>nd</sup> Grn / Yel	- 0.2	5 <sup>th</sup> Red	- 0.5	3 <sup>rd</sup> Yellow	- 0.3	6 <sup>th</sup> Red	- 1.0
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<b>Signal Output</b>	DC Signal: 2.0 V full scale, 1.0k ohm source impedance AC Signal: 10 mv/g peak												
<b>Accuracy</b>	Color Display: +/-5% of stated window value Digital Accessory: +/-5% +/-2 counts of reading												
<b>Power Source</b>	One Battery: 9V industrial grade Battery Life: 80 hours of continuous usage Power On/Off: turns on when 'PUSH' button is depressed – off when released												
<b>Operating Conditions</b>	Temperature: 0 – 50 deg C                      Humidity: below 95% RH, non-condensing All hardware is sealed for water resistance and dust contamination												
<b>Size / Weight</b>	1.55" H x 1.65" W x 9.375" L; 8.5 oz with battery												
<b>Standard Equipment</b>	Model 2000 DataMite, leather case, 9V battery, instruction manual, 6" and 1.5" stinger, wrist strap and digital display / cable assembly												
<b>Options</b>	Remote magnetic coupled sensor (in lieu of integral sensor) with integral coaxial cable Custom severity levels chosen for colour display windows per customer requirements Wide variety accessories to accommodate application (ie. LCD back-lighting, sensors etc)												



For more information about the DataMite Model 2000 or any of the other available DataMite models (models available to measure vibration, temperature, acoustic emission or combinations of these), contact Spectrum Instruments Ltd. at (613) 831-0007 or our Authorized Distributor in India, Saudi Arabia, Nigeria and Caribbean.

## Spectrum Instruments Ltd. (Canadian Authorized Distributors):

BC:	Optimum Reliability Solutions	P: 866-752-3066	F: 250-752-3016
ON:	WCD Technical Solutions Inc.	P: 519-585-7972	F: 519-578-4798
NS:	Atlantic Measuring Technologies	P: 902-461-2188	F: 902-461-5150
AB:	Optimum Reliability Solutions	P: 866-752-3066	F: 250-752-3016
QC:	Robam Sales	P: 514-591-9891	F: 514-696-9897