

# EXAMINER 1000

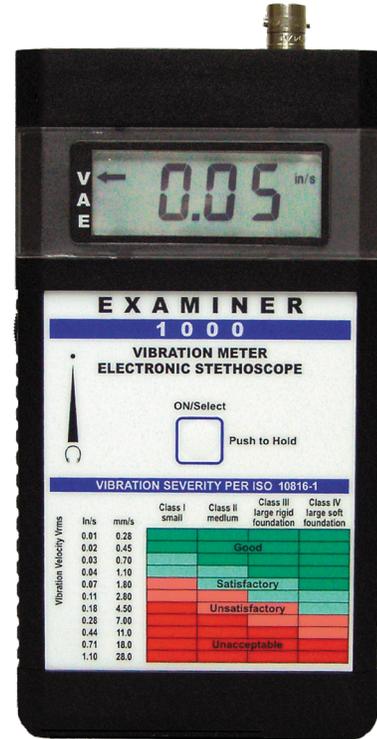
## Vibration Meter

### Features:

- One-button operation for easy use
- Front panel severity chart provides instant assessment of vibration
- Multiparameter readings gives the power to trend defects and avoid unplanned repairs
- Electronic stethoscope let's you hear what you see from the digital display

### Typical Uses:

- Trending overall vibration readings in process equipment such as:
  - Rolling element bearing
  - Motors AC/DC
  - Pumps
  - Gearboxes
  - Compressors
  - Fans
- Detecting vibration to determine dynamic conditions such as balance, bearing defects, and lubrication



The **EXAMINER 1000** is designed to be used with vibration limits established in ISO Standard 10816 to help you detect signs of malfunction or changes in rotating machinery during operation. This is accomplished with overall vibration (ISO VIB) and envelope measurements. Problems with bearings occur when there is a microscopic crack or flaw or when there is a breakdown in lubrication which leads to metal-to-metal interaction. The EXAMINER 1000 is designed to detect flaws or a lack of lubrication in bearings and gears at an early stage by measuring the high-frequency impacts through acceleration envelope methods.

# EXAMINER 1000 Vibration Meter

Specifications*	EXAMINER 1000 Vibration Meter
Vibration Sensor	Piezoelectric accelerometer 100 mV/g with magnetic base, probe and 5 ft. cable to BNC
Display	LCD 3.5 digits Indicators: Measurement, Hold, Low Battery, Units of Measure
Measurement Range	Acceleration: 0.01-19.99 g (RMS) Velocity: 0.01-19.99 in/sec, 0.1-199.9 mm/sec (RMS) Envelope: 0.01-19.99 gE (peak)
Frequency Range	Overall: 10 Hz - 10 kHz Envelope: 0.5 kHz - 10 kHz
Output	Sensor excitation: 18 V dc @ 2 mA (BNC) Audio output: 3.5 mm mini plug; 250 mW into 8 ohms, 150 mW into 32 ohms; adjustable volume control with off position
Power	Two (2) AA cells
Operating Time	20 hours continuous without headphones
Operating Conditions	-14 °F to 122 °F / -10 °C to 50 °C
Weight	Instrument: 7 oz. [0.19 kg] Complete kit: 2.85 lbs. [130 kg]
Dimensions	6.3 in. x 3.3 in. x 1.25 in. / 152 mm x 83 mm x 32 mm

Ordering Information	
<b>Examiner 1000 Kit</b>	<b>6400-011</b>
Includes Vibration Meter, batteries, accelerometer and integrated cable, magnetic base, stinger probe, stereo headphones, field carrying case, and Machinery Data Workbook	
<b>Examiner 1000 Kit with NIST</b>	<b>6400-011-CAL</b>
Same as above and NIST Certificate	
<b>Examiner 1000 Meter</b>	<b>6400-012</b>
Vibration Meter only; batteries included	
<b>Examiner 1000 Meter</b>	<b>6400-012-CAL</b>
Vibration Meter only; batteries included and NIST Certificate	

\*Specifications are subject to change without notice.

## VIBRATION SEVERITY PER ISO 10816-1

Machine		Class I small machines	Class II medium machines	Class III large rigid foundation	Class IV large soft foundation
in/s	mm/s				
Vibration Velocity Vrms	0.01	0.28			
	0.02	0.45			
	0.03	0.71		Good	
	0.04	1.12			
	0.07	1.80			
	0.11	2.80		Satisfactory	
	0.18	4.50			
	0.28	7.10		Unsatisfactory	
	0.44	11.2			
	0.71	18.0			
	1.10	28.0		Unacceptable	
	1.77	45.0			

