

## **Vibration Meter**

### ➤ **Fluke 805 Vibration Meter**

The Fluke 805 Vibration Meter is the most reliable vibration screening device available for frontline mechanical troubleshooting teams that need repeatable, severity-scaled readings of overall vibration and bearing condition.

## 1. Fluke 805 Vibration Meter



### ➤ Key Features

- Reliable, repeatable, accurate device for checking bearings and overall vibration
- Features innovative sensor design that minimizes measurement variations caused by device angle or contact pressure
- Provides consistent data quality at both low and high frequency ranges
- Offers four-level severity scale to assess urgency of problems and bearing condition

### • Specifications: Fluke 805 FC Vibration Meter

Specifications	
Low frequency range (overall measurement)	10 Hz to 1,000 Hz
High frequency range (CF+ measurement)	4,000 Hz to 20,000 Hz
Severity levels	Good, satisfactory, unsatisfactory, unacceptable
Vibration limit	50 g peak (100 g peak-peak)
A/D converter	16-bit
Signal to noise ratio	80 dB

Sampling rate	Low frequency: 20,000 Hz High frequency: 80,000 Hz
Real time clock backup	Coin battery
<b>Sensor</b>	
Sensitivity	100 mV g $\pm$ 10%
Measurement range	0.01 g to 50 g
Low frequency range (overall measurement)	10 Hz to 1,000 Hz
High frequency range	4,000 Hz to 20,000 Hz
Resolution	0.01 g
Accuracy	At 100 Hz $\pm$ 5% of measured value
<b>Amplitude Units</b>	
Acceleration	g, m/sec <sup>2</sup>
Velocity	in/sec, mm/sec
Displacement	mils, mm
<b>Infrared Thermometer (Temperature Measurement)</b>	
Range	-20 °C to 200 °C (-4 °F to 392 °F)
Accuracy	$\pm$ 2 °C (4 °F)

Focal length	Fixed, at ~3.8 cm (1.5")
<b>External Sensor</b>	
Note: Fluke supports but does not provide external sensors	
Frequency range	10 Hz to 1,000 Hz
Bias voltage (to supply power)	20 V dc to 22 V dc
Bias current (to supply power)	Maximum 5 mA
<b>Firmware</b>	
External interfaces	USB 2.0 (full speed) communication
Data capacity	Database on internal flash memory
Upgrade	Through USB
Memory	Up to 3,500 measurements
<b>Radiated Emission</b>	
Electrostatic discharge: burst	Standard EN 61000-4-2
Electromagnetic interference	Standard EN 61000-4-3
RE	Standard CISPR 11, Class A
<b>Environmental</b>	
Operating temperature	-20 °C to 50 °C (-4 °F to 122 °F)

Storage temperature	-30 °C to 80 °C (-22 °F to 176 °F)
Operating humidity	10% to 95% RH (non-condensing)
Operating/storage altitude	Sea level to 3,048 meters (10,000 feet)
IP rating	IP54
Vibration limit	500g peak
Drop test	1 meter
<b>General Specifications</b>	
Battery type	AA (2) Lithium Iron Disulfide
Battery life	250 measurements
Size (L x W x H)	24.1 cm x 7.1 cm x 5.8 cm (9.5 in x 2.8 in x 2.3 in)
Weight	0.40 kg (0.89 lb)
Connectors	USB mini-B 7-pin, external sensor jack (SMB connector)