

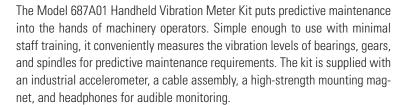
# **Handheld Vibration Meter Kit**

Conveniently Measures Vibration Levels of Industrial Machinery for Predictive Maintenance Requirements



## Highlights

- Measures Velocity and Acceleration
- Complies with ISO 2954 and ISO 10816 Standards
- Measures Vibration Severity
- Verifies Sensor Bias Voltage
- Troubleshoots Permanently Installed Sensors and Cables



The portable, lightweight, battery powered meter provides both overall acceleration and velocity measurements. The unit is ideal for measuring the vibration severity of fans, motors, and pumps, and is also useful for verifying the DC bias voltage of industrial accelerometers for troubleshooting permanently installed sensors and cables.

As with all IMI instrumentation, this equipment is complemented with toll-free applications assistance, 24-hour customer service, and is backed by a no-risk policy that guarantees satisfaction or your money refunded.



Model 687A01 Handheld Vibration Meter Kit







# **Specifications**

Model		687A01	
Performance		English	SI
Meter Frequency Response	(Velocity +10%, -20%) (Acceleration ± 3 dB)	600 to 60k cpm 3000 to 3M cpm	10 to 1000 Hz 50 to 50k Hz
Acceleration Range	(3-1/2 Digits)	0.01 to 19.99 g rms	0.01 to 19.99 g rms
Velocity Range	(3-1/2 Digits)	0.001 to 1.999 in/sec rms	0.001 to 1.999 in/sec rms
DC Bias Range	(3-1/2 Digits)	0.00 to 19.99 VDC	0.00 to 19.99 VDC
Meter Resolution		± 2 counts	± 2 counts
Meter Accuracy		± 3%	± 3%
Accelerometer Sensitivity	(± 20 %)	100 mV/g	10.2 mV/(m/s²)
Environmental			
Temperature Range	(Accelerometer) (Meter)	-65 to +250 °F +32 to +122 °F	-54 to +121 °C 0 to +50 °C
Electrical			
Excitation Voltage	(To Sensor)	23 to 25 VDC	23 to 25 VDC
Constant Current Excitation	(To Sensor)	1.4 to 2.6 mA	1.4 to 2.6 mA
Power Required		Internal Battery	Internal Battery
Internal Battery	(Type) (Quantity)	9 V 1	9 V 1
Battery Life	(Supplied Alkaline) (Optional Rechargeable Ni Cad)	10 hours 3 hours	10 hours 3 hours
Physical			
Electrical Connector	(Sensor Input) (Headphones)	BNC Jack 1/8 in Stereo Jack	BNC Jack No Metric Equivalent
Size	(Sensor Hex x Height) (Meter L x W x H)	11/16 x 1.65 in 5.9 x 3.15 x 1.2 in	11/16 in x 42.2 mm 150 x 80 x 30 mm
Weight	(Sensor) (Meter)	1.8 oz 0.569 lb	51 gm 258 gm
Mounting Thread	(Sensor)	1/4-28 Female	No Metric Equivalent

### **Kit Components**

Model 687A02 Meter

Model 603C01 Sensor

Model 050BQ006AC Sensor Cable

Model 070A47 Headphones

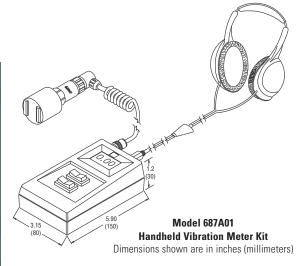
Model 080A131 Magnet

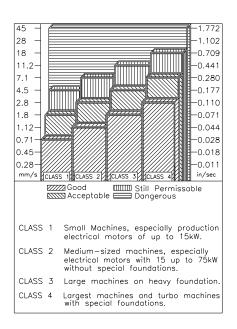
#### **Optional Versions**

Model R687A01 - Rechargeable Kit - supplied with Ni Cad battery, external battery charger, and power cord.

Model R687A02 - Rechargeable Meter - supplied with Ni Cad battery, external battery charger, and power cord.

Model M687A01 - Metric Version - supplied with Model M687A02 meter scaled for velocity range of 0.01 to 19.99 mm/sec rms





#### ISO 10816 Severity Chart

(Provided on the back of each meter)



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ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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