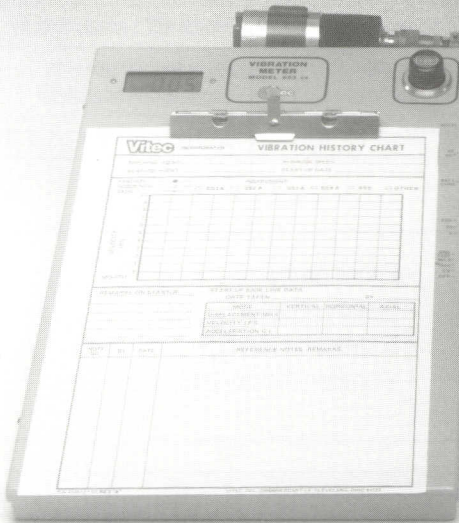


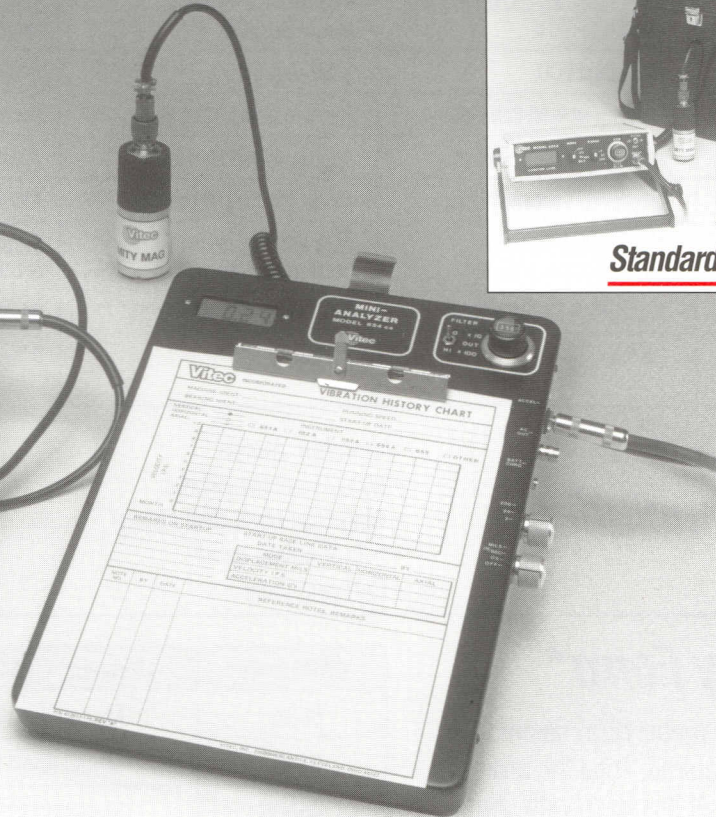


# Portable Vibration Meters and Analyzers

## Clipboard Style



*Compact, lightweight design  
for field usage*



## Standard Style

- **For easy, low-cost predictive maintenance**
- **Helps reduce your maintenance cost**
- **Detects bearing and gear problems**
- **Identifies source(s) of excessive vibration**
- **Easy field usage and data trending**

Vitec portable vibration meters — available in clipboard and standard styles — provide economical protection against rotating machinery failure by indicating increasing vibration levels. These lightweight units make it easy for all plant personnel to obtain accurate vibration readings.

Measuring and recording vibration data taken on rotating plant machinery enables users to develop trending charts which will alert personnel to possible future machinery problems.

These portable units provide three modes of measurement for quick detection of low or high frequency vibration: displacement (mils), velocity (in/sec) and acceleration (G's).

Internal rechargeable batteries provide up to 40 hours of field use. An AC signal output allows for analysis with an oscilloscope or other signal analyzer.

The **Models 653A and 653CS** are digital vibration meters with the added function of a bearing test mode which allows for early detection of defective anti-friction bearings (ball or roller) and gears.

The **Models 654A and 654CS** add a tuneable filter to the standard modes of measurement for the purpose of basic vibration analysis. This feature provides a narrow frequency band indication of complex machinery vibration for the purpose of identifying the sources of excess vibration.

# Specifications

| Model                    | Model 653A   | Model 654A   | Model 653CS  | Model 654CS  |
|--------------------------|--|--|--|--|
| <b>Modes</b>             | Displacement (mils)<br>Velocity (in/sec)<br>Acceleration (G's) | Displacement (mils)<br>Velocity (in/sec)<br>Acceleration (G's) | Displacement (mils)<br>Velocity (in/sec)<br>Acceleration (G's) | Displacement (mils)<br>Velocity (in/sec)<br>Acceleration (G's) |
| <b>Ranges</b>            | 0-2,0-20,0-200 in all three modes                              | 0-2,0-20,0-200 in all three modes                              | 0-2,0-20,0-200 in all three modes                              | 0-2,0-20,0-200 in all three modes                              |
| <b>Filters</b>           | Tuneable High Pass   | Tuneable   | Tuneable High Pass   | Tuneable   |
| <b>Accuracy</b>          | ± 5% from 5Hz-2KHz,<br>useable to 5KHz                         | ± 5% from 5Hz-2KHz,<br>useable to 5KHz                         | ± 5% from 5Hz-2KHz,<br>useable to 5KHz                         | ± 5% from 5Hz-2KHz,<br>useable to 5KHz                         |
| <b>Display</b>           | 3-1/2 Digit LCD  | 3-1/2 Digit LCD  | 3-1/2 Digit LCD  | 3-1/2 Digit LCD  |
| <b>Power Supply</b>      | Rechargeable Ni-Cad Battery                                    | Rechargeable Ni-Cad Battery                                    | Rechargeable Ni-Cad Battery                                    | Rechargeable Ni-Cad Battery                                    |
| <b>Battery Life</b>      | Approx. 40 reading hours                                       | Approx. 40 reading hours                                       | Approx. 40 reading hours                                       | Approx. 40 reading hours                                       |
| <b>Input</b>             | Model 4071 accelerometer                                       | Model 4071 accelerometer                                       | Model 4071 accelerometer                                       | Model 4071 accelerometer                                       |
| <b>Output</b>            | AC output for use with<br>oscilloscope or analyzer             | AC output for use with<br>oscilloscope or analyzer             | AC output for use with<br>oscilloscope or analyzer             | AC output for use with<br>oscilloscope or analyzer             |
| <b>Dimensions</b>        | 2-1/2" H x 9-3/4" W x 12" D                                    | 2-1/2" H x 9-3/4" W x 12" D                                    | 14" H x 9-1/2" W x 1-1/8" D                                    | 14" H x 9-1/2" W x 1-1/8" D                                    |
| <b>Instrument Weight</b> | 2.5 lbs.   | 2.5 lbs.   | 3 lbs.   | 3 lbs.   |

## Each Vitec Meter Kit includes:

- Vibration meter
- M4071 accelerometer
- Magnetic base (Mity Mag)
- 5-foot coiled cable
- Carrying case
- Pencil probe
- Battery charger
- Instruction manual
- Vibration history pad

## Order Entry Form \*

Select the vibration meter kit(s) desired and the quantity required. Total the order and include a copy of this form with your purchase order.

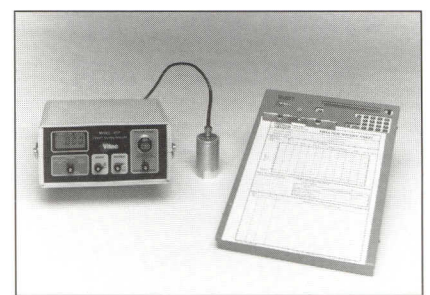
| Order Code         | Hardware Description | Unit Price \$ | Qty | Total, \$ |
|--------------------|----------------------|---------------|-----|-----------|
| 653A               | Model 653A Kit       |               |     |           |
| 654A               | Model 654A Kit       |               |     |           |
| 653CS              | Model 653CS Kit      |               |     |           |
| 654CS              | Model 654CS Kit      |               |     |           |
| <b>Total Order</b> |                      |               |     |           |

\*Also available in metric models.  
For information contact Vitec, Inc.

## For balancing purposes:

The Vitec **Model 655** Compact Balance Analyzer is used for dynamic balancing, vibration measurement and analysis. A hand-held strobe light is included which allows for detailed stop motion analysis. Light in weight (6.5 lbs.) and small in size (4"H x 8½"W x 12"D), the Model 655 is appropriate for everyday plant use by most personnel.

To complement the Model 655, the Balance Buddy clipboard computer will perform all your balancing calculations quickly and easily. Simply enter the vibration and phase data as prompted and the correction weight and angle are displayed. Each of the six balancing programs are easily accessed with simple keystrokes. Field balancing was never easier.



**Protecting the machines of production for more than a quarter-century.**

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