



# Vibration Measurement instrument

## **Viber M2™** Machine Protective Device (1 or 2 Channels)

Viber M2™ is a versatile, reliable and easy to use machine protector unit. M2 can give an alarm or stop the machine if failure is imminent. The M2 sends constantly machine vibration information as well as transducer and cable condition to the PLC.

### Each channel has:

- Three measuring ranges.
- Two independent alarm levels with manual or auto reset
- Two frequency ranges
- Current output proportional to the vibration level 4- 20 mA, suitable for connection to a PLC
- Monitoring of transducer and cable failure
- Analysis signal on BNC and terminal output

### Common for both channels:

- Two independent change over relays
- Two independent time delays of relay function
- One changeover relay for transducer or cable failure



### Description

The transducer signal is compensated in the input amplifier to correct signal level and selected frequency range. This signal is available at the front panel BNC connector and on terminals for further analysis.

The accelerometer uses velocity for analysis, alarm and mA signals. This signal can be amplified in 3 selectable ranges 0-10, 0-20 and 0-100 mm/s. Other ranges are optional upon order of the product.

When the pre set signal levels are reached a LED lamp is lit. If the levels stays higher during the selected delay time (0-90 s) the relay is activated. The M2 has manual or automatic resetting of the alarm status.

The signal level is converted to a corresponding current output between 4-20mA. This signal is available on terminals for connection to other instruments or data logger. The current output is disabled in case of transducer or cable failure

### Enclosure

Sealed (IP65), PVC box with transparent lid for overview of vibration and/or temperature levels, alarm settings and alarm status

Product of SWEDEN  
**VMI INTERNATIONAL**  
**AB**  
Gottorpsgatan 5  
582 73 Linköping, Sweden

### Authorised Distributor in INDIA:

### **VIBROTECH TRAINERS & CONSULTANTS PVT LTD.,**

(An ISO 9001:2015, ISO 45001:2018 Certified Company)

B2B, BBCL Sukhin, H – 29/30, South Avenue, Kamaraj Nagar, Thiruvanimiyur, Chennai -600041, INDIA

Phone: 044 – 24486363 / 64      Tele Fax: +91 – 44 - 24486364      Mobile : +91 94440 43414

E-Mail : [vibrotech@gmail.com](mailto:vibrotech@gmail.com), [vibrotechchennai@yahoo.com](mailto:vibrotechchennai@yahoo.com)

Web site: [www.vibrotechchennai.com](http://www.vibrotechchennai.com) / [www.vibrationconsultancy.com](http://www.vibrationconsultancy.com)

### Channel card for accelerometers

#### Input sensitivity

Standard 100mV/g: The positive input terminal supplies a 4 mA constant current at max. 20V to the built in transducer amplifier

#### Frequency range

1.5 - 2000 Hz are pre set. The lowest frequency range can be changed to 10 Hz on the pc-board

#### Analysis output

100 mV/g between 1.5 Hz-15000 Hz  
Min load 10 k  $\Omega$

#### Measuring range

Selectable between 0-10, 0- 20 or  
0-100 mm/s  
This selection does not influence the sensitivity of the analysis output



**Viber M2™ fulfils the following Standards:**

**EN50081-1, EN55011 (B), EN-80052-2, EN61000-4-2, -3, -4, -5**

#### Options

Customer specified frequency and measuring ranges  
Adaptation to temperature measurements with Pt100 elements  
Flash tone siren mounted on enclosure

#### Ordering codes

M2-1/A for one accelerometer  
M2-1FT/A for one accelerometer and flash tone  
M2-2/A for two accelerometers  
M2-2FT/A for two accelerometers and flash tone

#### RMS Value

The instrument measures the RMS value of the signal within the selected frequency range

#### Current output

The current output is 4-20 mA on pc-board. Max. load not more than 600 ohm or 12V. 20 mA refers to 100% of selected measuring range.

#### Time delay

The time delay of relay activation is adjustable between 0 and 90 sec.

#### Relay output and functions

Single pole change over relay 5A/250VAC or 5A/24V

The relay coils can be activated or deactivated below the alarm level.

The 2-channel version has shared relays for both channels and the highest level activates the relay.

#### Power supply

Standard is 100-240VAC. Optional 24VDC.

#### Enclosure dimensions

Width 170mm, height 160mm, depth 130mm

Product of SWEDEN  
**VMI INTERNATIONAL**  
**AB**  
**Gottorpsgatan 5**  
**582 73 Linköping, Sweden**

#### Authorised Distributor in INDIA:

#### **VIBROTECH TRAINERS & CONSULTANTS PVT LTD.,**

(An ISO 9001:2015, ISO 45001:2018 Certified Company)

B2B, BBCL Sukhin, H – 29/30, South Avenue, Kamaraj Nagar, Thiruvanimiyur, Chennai -600041, INDIA

Phone: 044 – 24486363 / 64      Tele Fax: +91 – 44 - 24486364      Mobile : +91 94440 43414

E-Mail : [vibrotech@gmail.com](mailto:vibrotech@gmail.com), [vibrotechchennai@yahoo.com](mailto:vibrotechchennai@yahoo.com)

Web site: [www.vibrotechchennai.com](http://www.vibrotechchennai.com) / [www.vibrationconsultancy.com](http://www.vibrationconsultancy.com)