

Sentinel® VM – 12 Channel Vibration Monitor



VM - Key Features:

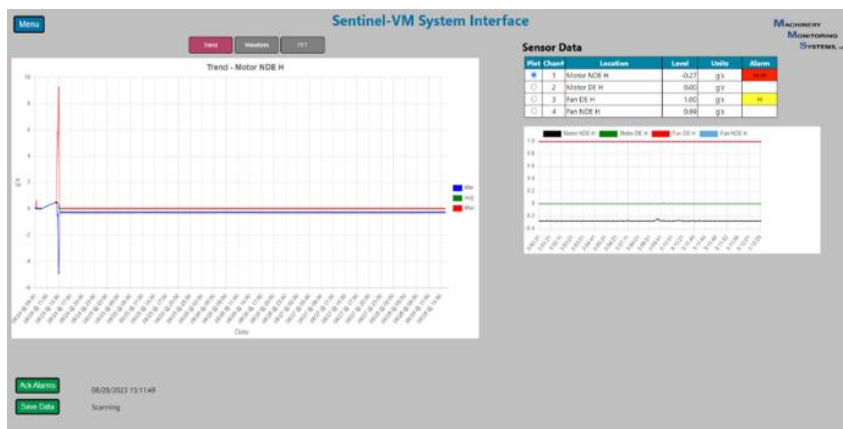
- 8 accelerometer or velocity input channels (ICP)
- 4 configurable 4-20 mA or 0-5 volt input channels
- Changeable Usernames, Encrypted Passwords and Multi-Factor Authentication per TSA mandates
- No special software required, just a Web Browser and connection to module
- MODBUS (RS-485 & Ethernet) communication
- Optional Alarm Relays (Dry contacts)
- Class I, Division 2, Groups A, B, C, D

The MMS Sentinel-VM is a complete, stand alone 12 channel machinery monitoring system. The VM can monitor up to 8 accelerometer or velocity sensors and 4 analog sensors (4-20 mA or 0-5 volt) for inputs like temperature, pressure, flow, or rod drop/runout. It includes an embedded web software interface that displays the overall values for each channel, 2 alarm levels, sensor OK as well as short and long-term trends graphs. Alarm levels can be set for each channel individually. The embedded software also displays dynamic waveforms and up to a 6400 line FFT without any additional software needed. MODBUS communications provide the data to the Unit PLC or DCS. Optional alarm relays are also available.



Sentinel-VM User Interface:

- Embedded Web browser-based software
- Overall vibration levels
- Configurable alarm levels
- Sensor OK\Not Ok indication
- Short term trend
- Long term trend (Average, Minimum & Maximum)
- Dynamic Waveforms
- FFT plots



Sentinel-VM System Interface

Menu: Home, Alarms, FFT

Company Information:

Company Name:
 Station Name:
 Location:
 Unit Name:

Rated Speed (RPM):
 Rated Load (HP):

Module Setup:

Module Number:
 IEC Offset:

IEC Offset:

Module: ☐ Enable ☒ Disable
 Engine: ☐ Enable ☒ Disable
 Engine: ☐ Enable ☒ Disable

Save Interval (seconds):
 Web Server Port:

Settings:

IEC Offset:
 IEC Offset:
 IEC Offset:
 IEC Offset:

Ch	Type	Zone	Span	Zone	Span	Module	Unit	Location	High	High-High
1	g	1	0.25	0.25	0.25	100	g1	Motor NDE H	0.25	0.25
2	g	1	0.25	0.25	0.25	100	g1	Motor DE H	0.25	0.25
3	g	1	0.25	0.25	0.25	100	g1	Pan DE H	0.25	0.25
4	g	1	0.25	0.25	0.25	100	g1	Pan NDE H	0.25	0.25
5	g	1	0.25	0.25	0.25	100	g1	Motor NDE H	0.25	0.25
6	g	1	0.25	0.25	0.25	100	g1	Motor DE H	0.25	0.25
7	g	1	0.25	0.25	0.25	100	g1	Pan DE H	0.25	0.25
8	g	1	0.25	0.25	0.25	100	g1	Pan NDE H	0.25	0.25
9	g	1	0.25	0.25	0.25	100	g1	Motor NDE H	0.25	0.25
10	g	1	0.25	0.25	0.25	100	g1	Motor DE H	0.25	0.25
11	g	1	0.25	0.25	0.25	100	g1	Pan DE H	0.25	0.25
12	g	1	0.25	0.25	0.25	100	g1	Pan NDE H	0.25	0.25

Buttons: Submit

Set Module Data & Time:

Module Setup:

Module: ☐ Enable ☒ Disable
 IEC Offset:
 IEC Offset:
 IEC Offset:
 IEC Offset:

Buttons: Change, Stop, Start

Internet Setup:

IP Address:
 Gateway:

Buttons: Change

System:

Buttons: Change Password, Add User, Delete User

System Update:

Buttons: Update, Execute

Reboot System:

Buttons: REBOOT

Buttons: Submit

Sentinel-VM System Interface

Sign In

Username:

Password:

Module Serial Number:

Buttons: Submit

Sentinel-VM Specifications

Power Requirements	13 W@24 VDC (18-30 VDC) Customer-provided power must be sourced from SELV/LPS power source
Sensor Inputs	8 accelerometer or velocity input channels (ICP) and 4 analog input channels (4-20 mA or 0-5 v)
Relay Output	Dry Contacts, Normally Energized NO & NC Contacts Resistive Load: 2 A, 30 VDC max
Size	12" x 8" x 2"
Weight	3 lbs. (w/ Cover & Mounting Plate)
Environment	Indoor use, non-wet location
Operating Temp.	0 - 60 °C (32 – 140 °F)
Operating Humidity	5 – 95% (Non-condensing)
Hazardous Area Rating	Class I, Division 2, Group A, B, C, D Temperature Code: T4 Ambient Temperature: 0 °C < Tamb < 60 °C Certificate #: SGSNA/22/SUW/00029X