

## Sentinel® VM – 12 Channel Vibration Monitor



### VM-II - Key Features

- 8 accelerometer or velocity input channels (ICP)
- 4 configurable 4-20 mA or 0-5 volt input channels
- Supports both rotating (time-based) and reciprocating (crank-angle based) machinery
- Changeable Usernames, Encrypted Passwords & Multi-Factor Authentication per TSA mandates
- No special software required, only Web Browser & connection to the module. No monthly or annual subscription fees.
- MODBUS (RS-485 & Ethernet) communication
- Optional Alarm Relay (Dry contacts)
- Class 1, Division 2, Groups A,B,C,D

The MMS Sentinel-VM is a complete, stand-alone 12 channel machinery monitoring system. The VM monitors 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. No monthly or annual subscription fees.

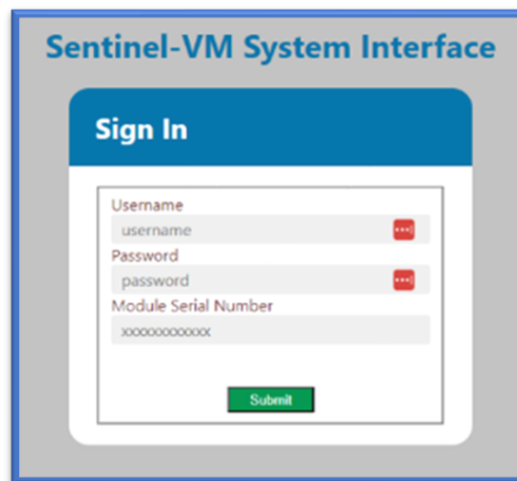
MODBUS communications provide the data to the Unit PLC or DCS. Optional alarm relay also available.



## Sentinel-VM User Interface

- Embedded Web browser-based software app accessible via ethernet/network output
- Time based and/or Crankangle based vibration waveforms
- Overall vibration levels
- Configurable alarm levels
- Sensor OK\Not-Ok indication
- Modbus serial or TCP/IP output
- Short term trend (15 minute)
- Long term trend 7 day (Average, Minimum & Maximum)
- Dynamic Waveforms
- FFT plots
- Active cursor with vibration levels and date\time stamp
- Zoom\Un-zoom
- FFT graph includes multiples of run speed marker (10X) and multiple of cursor position

## Authentication Screen TSA Compliant Login



The screenshot shows the 'Sentinel-VM System Interface' login page. It features a 'Sign In' header and three input fields: 'Username' (containing 'username'), 'Password' (containing 'password'), and 'Module Serial Number' (containing 'xxxxxxxxxxxx'). Each field has a red eye icon for toggling visibility. A green 'Submit' button is located at the bottom of the form.

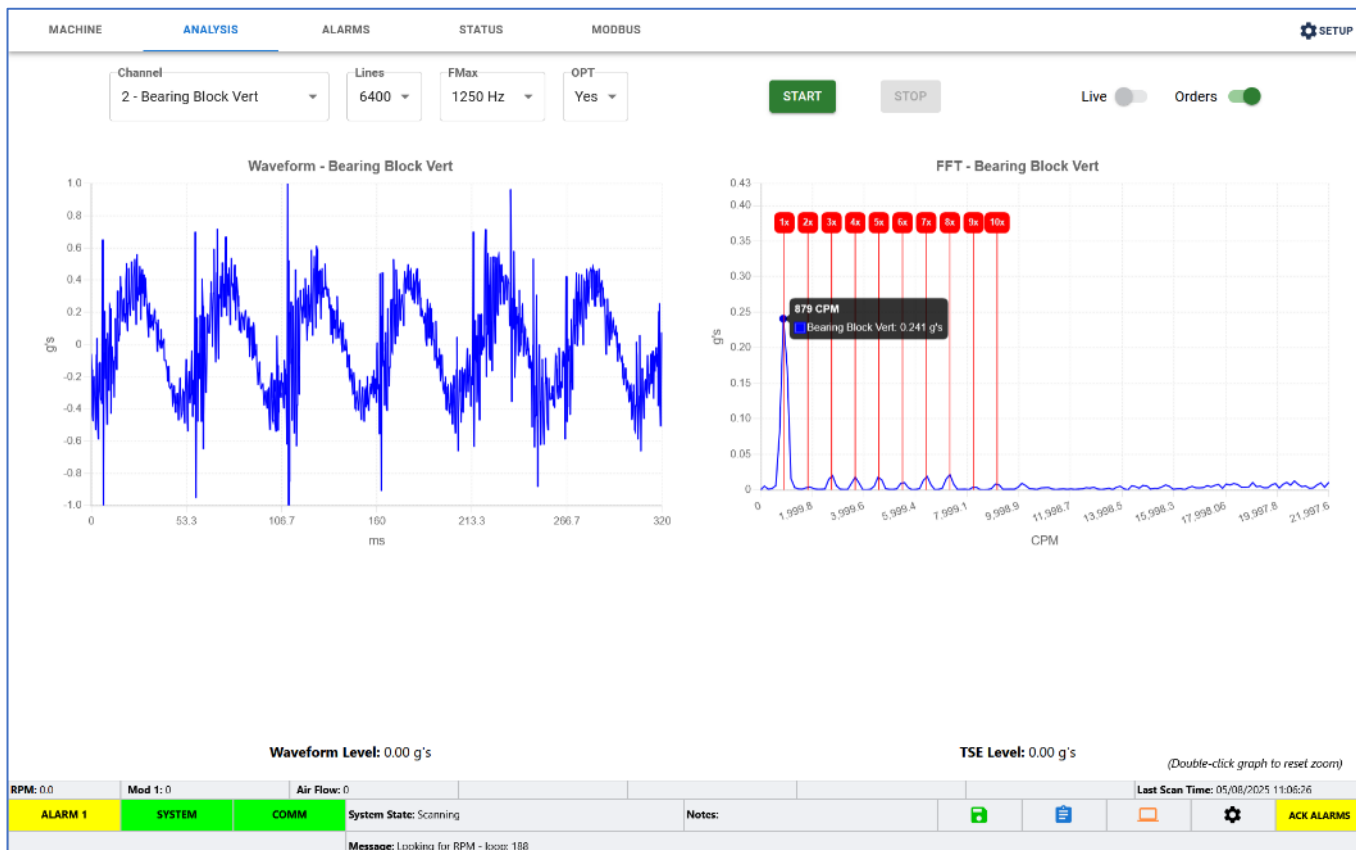
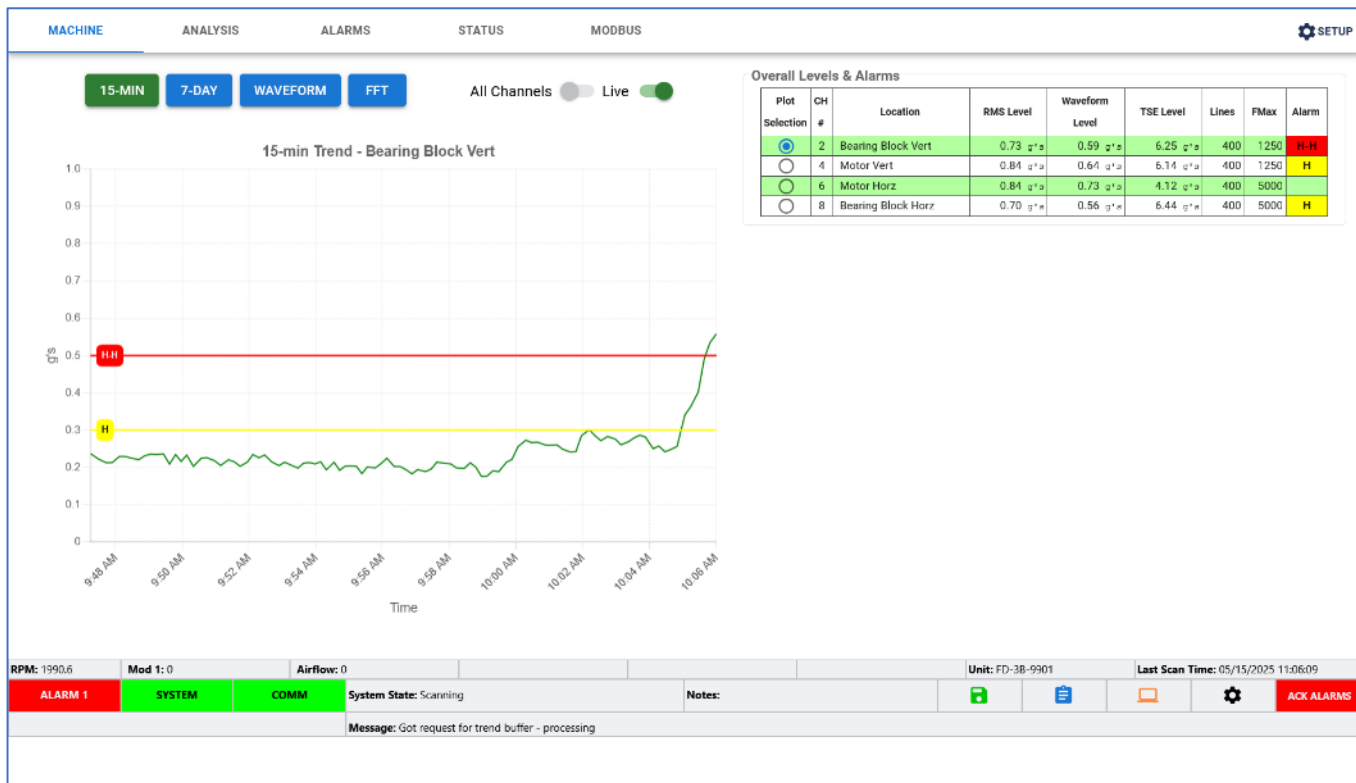
## Short term & Long term trends



# Data Sheet

M1520-01

Sentinel® VM-II



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## 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