



VMS Co., Ltd

VMS Reliability Systems – Korea

Room 1106, QB Centum Bldg, 90, Centum Jungang-ro, Haeundae-gu, Busan, Korea
TEL +82 51 782 2323 | FAX +82 51 782 0808 | E-MAIL admin@vmsco.co.kr

www.VMSCO.co.kr

Although care has been taken to assure the accuracy of the data compiled in this publication, VMS does not assume any liability for errors or omissions. VMS reserves the right to alter any part of this publication without prior notice.

- VMS is a registered trademark of VMS.
- All other trademarks are the property of their respective owners.



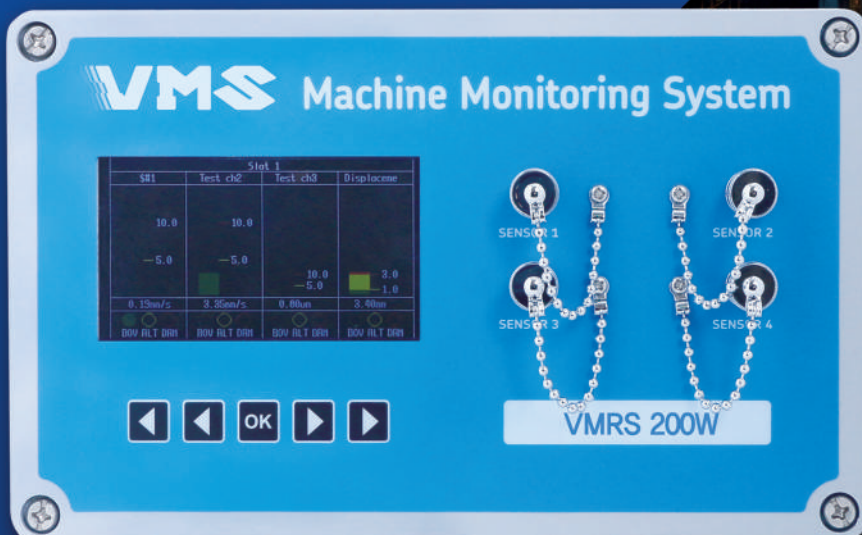
ISO 9001 / ISO 14001

2015.09.08



4ch Machine Monitoring System

Stand-alone VMRS 200W



4ch Machine Monitoring System

Stand-alone VMRS 200W Series



To save time and money in the field, VMS offer 4-channels continuous monitoring System.

■ Every Monitoring for Every Machinery need

VMS 4CH MMS is simple and cost-effective online monitoring system. VMRS 200W series detect any fault well in time for planned maintenance and repairs ensuring minimum interruption to production processes, utility equipments and ships. Immediate results of the evaluated conditions are presented on the front panel display as live bar graph with Alert and Danger levels. It converts a vibration input signal to a user-defined broadband value proportional to RMS of vibration velocity, acceleration or True Peak-To-Peak of displacement. Each channel provides 1 Alert relay, 1 Danger relay and 4 to 20 mA output suitable for Process Control system (DCS or PLC).



■ Features

- Up to 4 of Dynamic simultaneous monitoring
- With Alert and Danger as two independent set points and contact relay outputs for each channel
- Selectable Individual channel live bar-graph displays
- Programmable Alert or Danger Level
- Isolated 4–20mA output signals (Optional)
- Buffered raw output signals
- API 670 compliant

■ Description

The full-scale value of the velocity, acceleration and displacement is output as 4 to 20 mA and can be further converted to a 1 to 5 VDC output voltage by using a 250 Ohm precision resistor. The Alert/Danger set points from 0 to 100% of full scale for each channel are adjustable using the simple configuration software. Each Contact Relay has adjustable delay of 0.1 to 10 seconds and can be independently configured as Normally open (NO) or Normally closed (NC) and latching or non-latching. Latched relays can be reset locally. 4-BNC connectors mounted on the front of the MMS unit provide easy access to each buffered transducer signal (both the un-filtered vibration signal and DC bias voltage). Portable test equipment or analyzers can be connected to the buffered outputs without disturbance to any monitoring function.

Specifications

Power requirement

Input voltage	85 ~ 264VAC
Input Frequency	47 ~ 63 Hz
Safety standard	EN 60950-1

Signal Input

Sensor	Accelerometer, Velocity transducer, Eddy-probe
Analogue input	4~20 mA, 1~5 VDC
Sensor sensitivity	Selectable via Jumper
Sensor OK detection	Continuous monitoring of the MMS bias and signal voltage. If voltage exceeds preset limits, the 4 to 20mA output currents is reduced to less than 2mA.
Channels	Max. 4ch

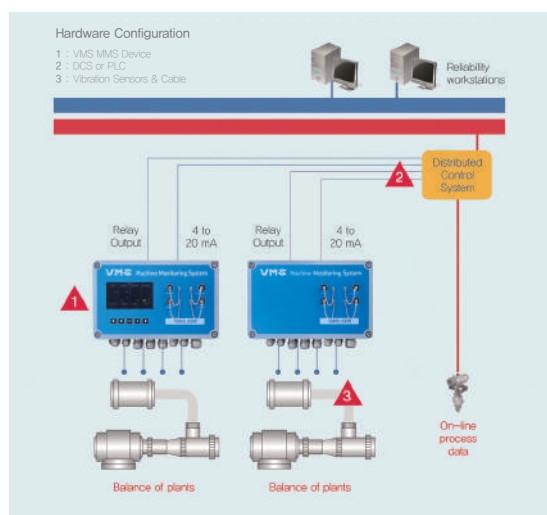


With Display Option



Without Display Option

System Configuration



Output

Buffered output	4-BNC connector, Screw terminals
Buffered output Sensitivity	Same as a sensor sensitivity
Screw terminal output Sensitivity	Same as a sensor sensitivity
Sensor sensitivity	Selectable via Jumper
Accuracy	Typ. $\pm 1\%$ of full-scale range
Analogue Output	Isolated 4~20mA
Relay rating	
· max switching voltage	250 VAC
· max switching current	5A

Environment

Working temp	-20 ~ +80 °C
Working humidity	20 ~ 90% RH non-condensing
Storage temperature	-40 ~ +85 °C
Storage humidity	10 ~ 95% RH
Enclosure	IP 65

Physical

Casing	Aluminum die-casing
Color	Body : Gray, Front : Blue
Dimension	260 x 160 x 90mm
Weight	App. 700g

Interface

USB service interface

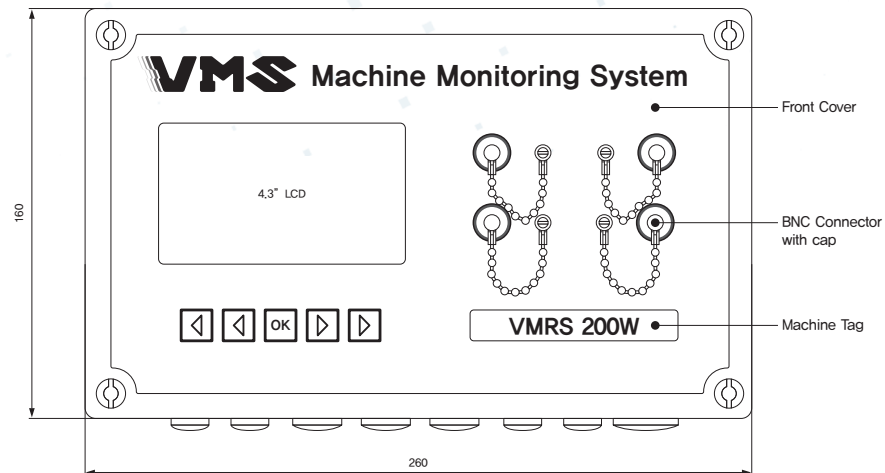
CE Mark Directives

EMC Directives	EN 61000-3-2 EN 61000-3-3 EN 61000-6-2 EN 61000-6-4
Low Voltage Directives	EN 61010-1

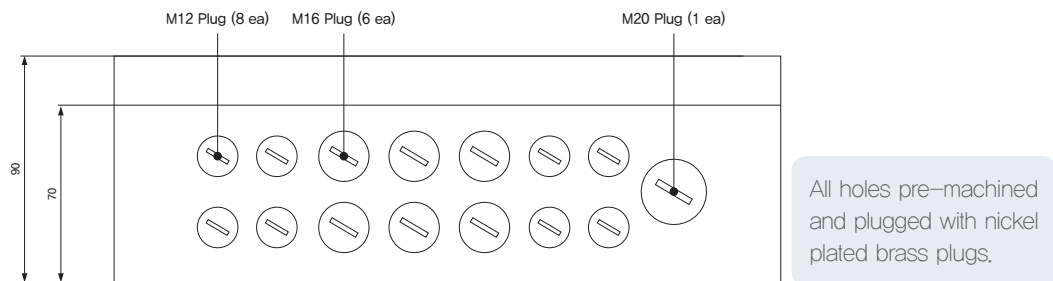
Mechanical Drawings – With Display option

Designation : VMRS 200W □□-□□-□□-□□

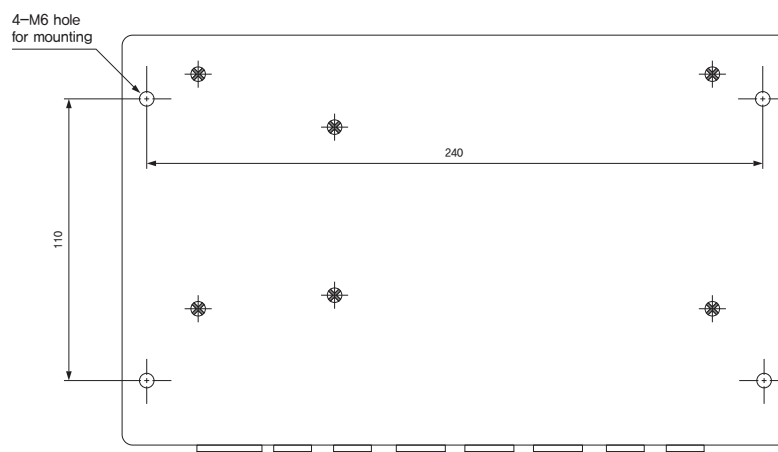
■ ■ Figure 1 : Front view



■ ■ Figure 2 : Bottom view



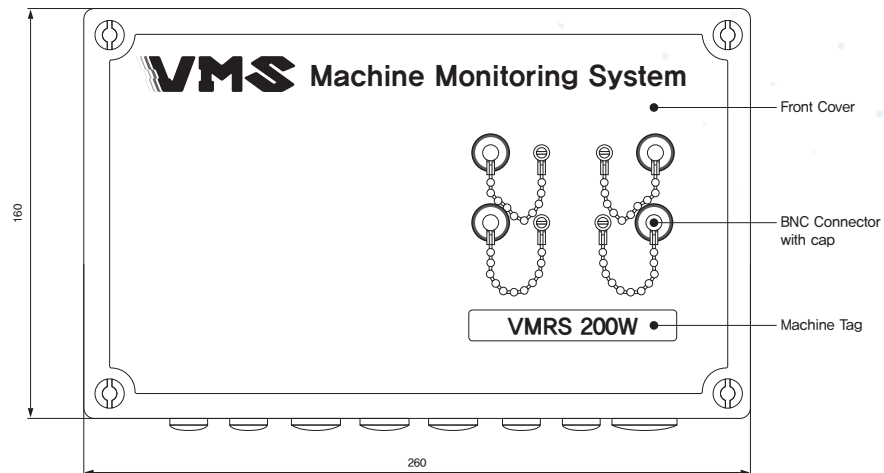
■ ■ Figure 3 : Rear view



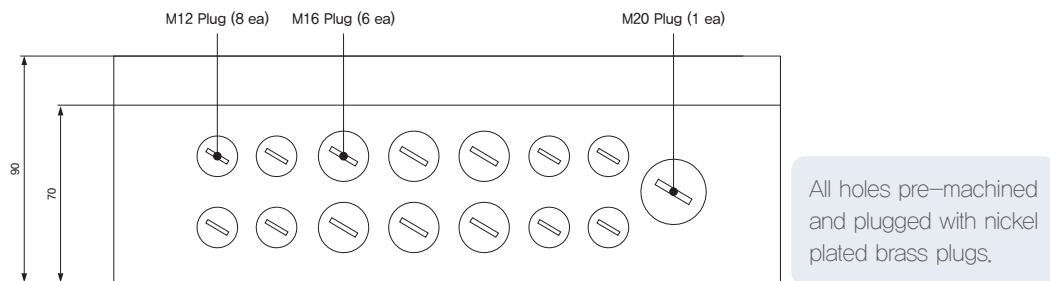
Mechanical Drawings – W/O Display option

Designation: VMRS 200W □□-□□-□□-□□- B

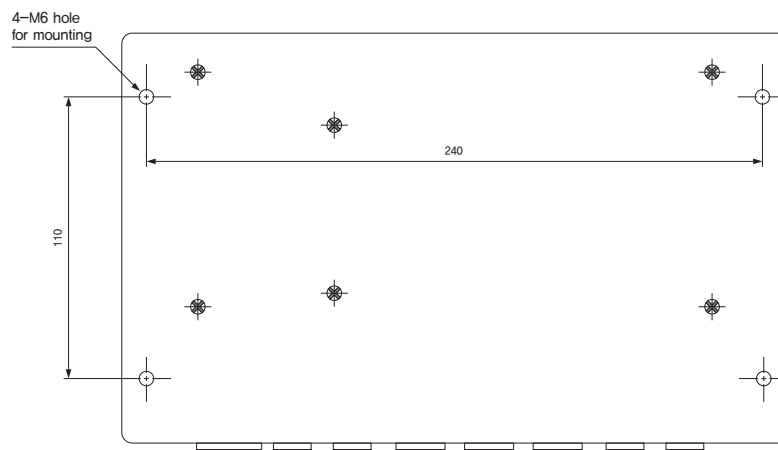
■ Figure 4 : Front view



■ Figure 2 : Bottom view

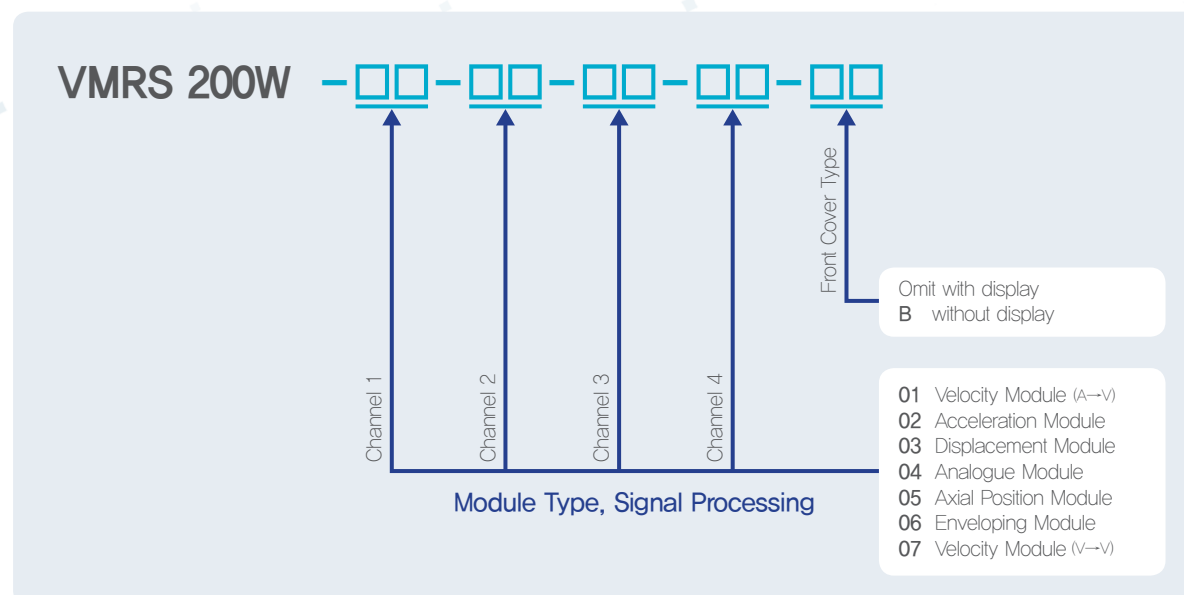


■ Figure 3 : Rear view



Ordering information – Complete Unit

Complete unit Designation



Example : VMRS 200W – 01 – 02 – 07 – 03 – B

Module, Signal processing. Please see the table below

□□	Description	Signal Characteristics			
		Input Sensor	Sensitivity	Frequency	Remark
00	Blank	—	—	—	—
01	Velocity Module (A to V)	Accelerometer	100mV/g, 500mV/g	10 to 1,000 Hz 2 to 2,000 Hz	Default 10 to 1,000 Hz
02	Acceleration Module	Accelerometer	100mV/g, 500mV/g	2 to 20,000 Hz	2 to 20,000 Hz
03	Displacement Module	Eddy Current Probe System	100mV/mil, 200mV/mil	2 to 2,000Hz	2 to 2,000Hz
04	Analogue Module	Process Signal, Sensor	4~20mA, 1~5VDC	N/A	N/A
05	Axial Position Module	Eddy Current Probe System	100mV/mil, 200mV/mil	2 to 2,000Hz	2 to 2,000Hz
06	Enveloping Module	Accelerometer	100mV/g, 500mV/g	Filter #2, #3	Default Filter #3
07	Velocity Module (V to V)	Velocity Sensor	100mV/g, 500mV/g	10 to 1,000 Hz 2 to 2,000 Hz	Default 10 to 1,000 Hz

Applications

Cooling tower, Fans, Pumps, Blowers, Motors, Pulverizes, Air Compressors, Crusher Small Reciprocating Compressors ,Small electric motors, Small Hydro turbines, Centrifuges, LNG Carriers & Other Ships and other equipment assets required monitoring and protecting

Product Support Plan (PSP)

A range of Product Support Plans is available to protect your investment. Contact your local VMS sales representative for additional information.

Installation and training

Installation and training available through your local VMS supplier or representative.

OEM Available

VMS has experience from most industry and has produced with a global brand of OEM contract. Please contact VMS for further information ; admin@vmsco.co.kr

