



DM200 Dual Channel A/V/D Vibration Monitor

Introduction

The DM200 is a dual channel vibration monitor. It is used to monitor the absolute vibration with acceleration, velocity or displacement of rotating machinery.

Features

- ✓ **Dual channel case vibration monitoring with acceleration, velocity or displacement**
- ✓ **Independent alert and danger dual relays on each channel**
- ✓ **Fully digital, long term stability**
- ✓ **IP 65 or NEMA 4X environmental rating**
- ✓ **Bright 4 digit LED display**
- ✓ **Front panel buffered output**
- ✓ **Wide power supply range**
- ✓ **Cost effective**

Specifications

Electrical

Power Supply:

90 – 250VAC, 40 – 60Hz, 0.5A

Frequency Response: (± 3 dB):

Standard: 2.0 – 3.0 KHz without integration

Integration: 10 – 3.0 KHz

Low frequency option: 0.5 – 100Hz

External Sensor:

Accelerometer: 100 mV/g

Velocity sensor: 4.0mV/mm/s

Low frequency sensor: 4.0mV/ μ m

Other sensors: specify in order

Sensor Power:

Current mode sensor: 24VDC, 4mA

Low frequency sensor: 24VDC, 3 wire



Buffered Output:

Original vibration, un-filtered

Sensitivity/frequency response: same as the sensor

Impedance: < 100 Ω

Maximum cable distance: 300m (1,000ft)

Overall Vibration Output:

4 – 20mA source

Load resistance < 500 Ω

System Not OK: Output < 3.5mA

Alarms:

Dual dry-contact relays on each channel

Each alarm can be programmed separately

Setting: 0 – 100% full scale

Accuracy: $\pm 0.1\%$

Relays (Alert/Danger):

Seal: Epoxy

Capacity: 3A/220VAC resistive load

Relay Type: SPDT

Isolation: 1000VDC

Alarm Delay:

Factory programmable: 1-30 seconds with time interval of 1 second (specify in order)

Nominal 6 seconds

Trip Multiply:

Factory programmable with a factor of 2 or 3 (specify in order)

Nominal factor or 3

RESET/ BYPASS:

Local RESET: The bottom "SET" button

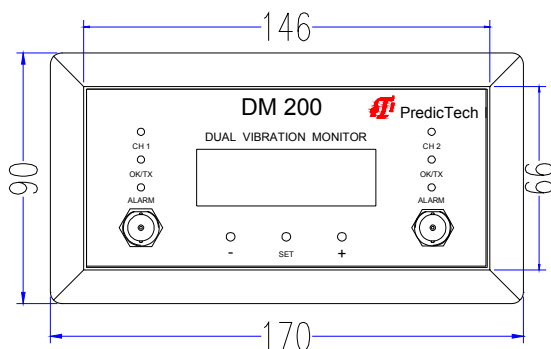
Remote RESET/BYPASS

Display:

4 digit LED displays channel 1 and 2 in three seconds interval.

OK: channel ok indication

Alarm: alarm indication





Dual Channel Vibration Monitor

Physical

Weight: 1,300 g (2.86 lbs)
Installation: panel mount
Dimension: see graphic

Environmental

Temperature

Operation: -20°C to +70°C
Storage: -40°C to +100°C

Humidity:

95% non-condensing

With IP65 Rating or NEMA 4X:

Front panel buffered output is unavailable.
Alarms setting and ZERO calibration is unavailable from the front panel access.

Ordering Information

DM200-AXX-BX-CX-DX

AXX: Full Scale

A00: 0 - 200um (8mil) pk-pk
A01: 0 - 500um (20mil) pk-pk
A02: 0 - 100um (4mil) pk-pk
A03: 0 - 250um (10mil) pk-pk
A05: 0 - 125um (5mil) pk-pk
A06*: 0 - 50mm/s (2.0 ips) pk
A07: 0 - 100mm/s (4.0 ips) pk
A08: 0 - 20mm/s (0.8 ips) pk
A11: 0 - 25mm/s (1.0 ips) pk
A12: 0 - 5.0g pk
A13: 0 - 10g pk
A26: 0 - 50mm/s (2.0 ips) rms
A27: 0 - 100mm/s (4.0 ips) rms
A28: 0 - 20mm/s (0.8 ips) rms
A31: 0 - 25 mm/s (1.0 ips) rms

BX: Sensor (not included)

B0*: TM0782A, TM0783A, TM0786A TM016-782 or any ICP accelerometer with 100mV/g (A00-A05 not applicable)
B1: TM0793V, TM0796V, TM016-793 or any ICP velocity sensor with 4mV/mm/s (A12, 13 not applicable)
B2: TM079VD (A12, 13 not available)
BXXX: Seismic velocity sensor, Sensitivity = XXX mV/in/sec (A12, 13 not available)

CX: Frequency Response

C0*: Normal Frequency (B2 not applicable)
C1: Low Frequency (B2 only)

DX: Environmental Rating (Front Panel)

D0*: No rating
D1: IP65 or NEMA 4X (buffered output and setting not available)

* Factory default

Optional Accessories:

DM200 works with an external accelerometer or velocity sensor as a system.

TM0782A, TM0783A, TM0786A, TM016-782:

Accelerometers

TM0793V, TM0796V, TM016-793:

Velocity sensors

TM079VD:

Low frequency sensor

TM070X:

Sensor cables



Dual Channel Vibration Monitor

Field-Wiring Diagram

