



TM201 Transmitter-Monitor for Shaft Vibration

Condition Monitoring

- ✓ Measuring rotation machinery shaft vibration. System output is displacement.
- ✓ Monitoring vibration increase due to shaft imbalance, misalignment, looseness etc.
- ✓ System can be used in hazardous area.

Machine Type

- ✓ All kinds of rotation machines with sleeve bearing. Such as blower, compressor, pump, gearbox, and power generators etc.

Output

- ✓ 4-20mA or 1-5V source.
- ✓ LED indication of system OK, Alert and Danger.
- ✓ Relay output of Alert and Danger (SPDT).
- ✓ Local and remote RESET/BYPASS.
- ✓ Buffered Output
- ✓ 24VDC, 110VAC or 220VAC power input.

Specifications

Electrical

Power Supply:

22-30VDC, 100mA (Non isolated).
90 - 250VAC, 50Hz or 60Hz, 50mA.

Frequency Response (± 3 dB):

2.0 ~ 5.0KHz.
Low frequency options: 0.5 ~ 100Hz.

Sensor Interface:

Sensitivity:
8.0 mV/um (200mV/mil).

Connectors:

A/P: Power, -24VDC.
B/S: Signal.
COM: Ground and shield.

Buffered Output:

Original vibration, un-filtered.
Nominal 2-18VDC.
Impedance: 100 Ω .
Maximum cable distance: 300m (1000ft).
Sensitivity: 8.0mV/um (200mV/mil) nominal.

Overall Vibration:

4-20mA, source. Driving load resistance up to 750 Ω .
1-5V, source. Output impedance 250 Ω .

Alarm Setup:

0 ~ 100% FS.
Accuracy: $\pm 0.1\%$.

Relays:

Seal: Epoxy.
Capacity: 2A/220VAC or 2A/24VDC, resistive load.
Relay type: SPDT.
Isolation: 1000VDC.

Factory Default:

Relay normally latched and de-energized.
Timed alarm defect is approx. 3 seconds.

Power-up inhibit is set to 10 seconds nominal.

LED Machine Condition Indicator:

Green: Self-test passed, System works OK.
Yellow: Vibration over Alert level.
Red: Vibration over Danger level.

RESET/BYPASS:

Local reset is on monitor front panel.
Remote RESET/BYPASS: Short the connector pin RESET and COM will engage system reset and bypass.

Physical

Dimension: Height: 75mm (2.95"), see figuration.
Weight: 1.0kg (2.0 lb).

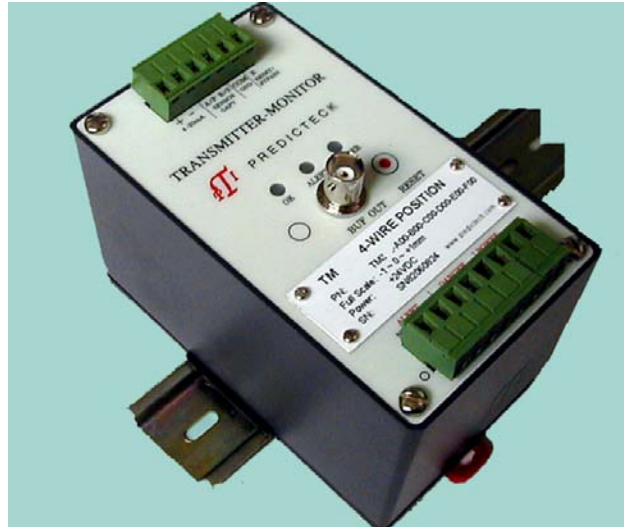
Environmental

Temperature:

Operation: -35°C ~ +70°C.
Storage: -40°C ~ +100°C.

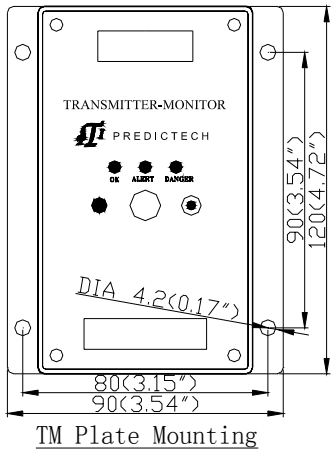
Humidity:

90% non-condensing.





Portable and Online Condition Monitoring Products



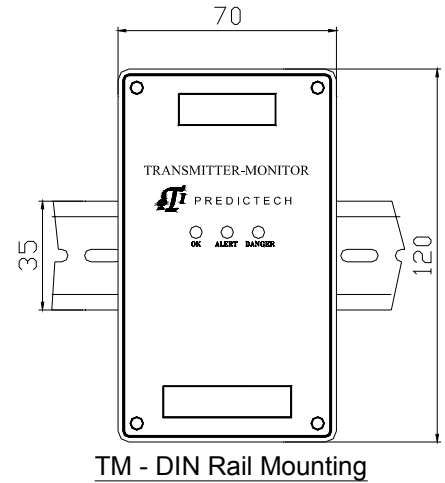
- A01: 0 ~ 1000um pk-pk
- A02: 0 ~ 100um pk-pk
- A03: 0 ~ 10mil pk-pk
- A04: 0 ~ 50mil pk-pk
- A05: 0 ~ 5.0mil pk-pk
- A06: 0 ~ 200um pk-pk (0.5 ~ 100Hz)
- A07: 0 ~ 1000um pk-pk (0.5 ~ 100Hz)
- A08: 0 ~ 100um pk-pk (0.5 ~ 100Hz)

- BXX: Power Supply.**
- B00*: +24VDC
 - B01: 220VAC
 - B02: 110VAC
 - B03: 90~250VAC

- CXX: Alarm.**
- C00*: With Epoxy sealed relays
 - C01: No Alarm
- DXX: Overall Vibration.**
- D00*: 4-20mA
 - D01: 1-5V

- EXX: Buffered Output.**
- E00*: With Buffered Output
 - E01: Without Buffered Output
- GXX: Mounting.**
- G00*: DIN rail mounting.
 - G01: Plate mounting.

* Denote factory default.



Ordering Information

Standard configuration:

TM201-A00-B00-C00-D00-E00-G00

8mm probe:

TM0180-A07-B00-C05-D10

Extension cable:

TM0181-A40-B00

Driver:

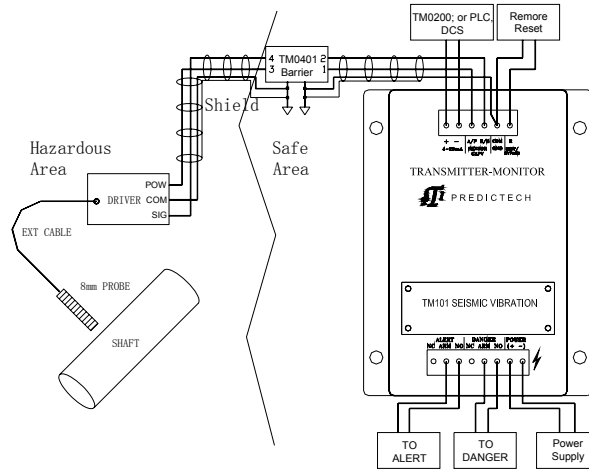
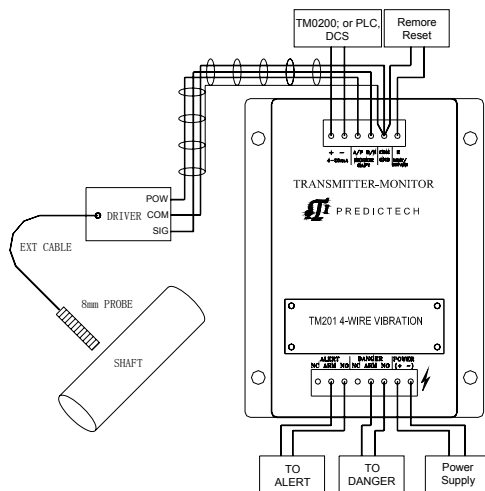
TM0182-A50-B00-C00

TM201-AXX-BXX-CXX-DXX-EXX-GXX

AXX: Full Scale.

A00*: 0 ~ 200um pk-pk

TM201 Field-wiring Diagram



TM201 Accessories

TM201 must work with proximity probe transducer.

TM0180: 8mm probe.

TM0105: 5mm probe.

TM0181: Extension cable.

TM0182: Driver.

TM900: Power converter

TM0200: 3-1/2 digit display unit.

TM0302: Housing, for 2 TMs or 6 drivers.

TM0306: Housing, for 6 TMs or 16 drivers.



TM202 Transmitter-Monitor for Thrust Position/Differential Expansion

Condition Monitoring

- ✓ Measuring rotation machinery thrust position, or rotor differential expansion due to thermo-expansion.
- ✓ System can be used in hazardous area.

Machine Type

- ✓ All kinds of rotation machines with sleeve bearing. Such as blower, compressor, pump, gearbox, and power generators etc.

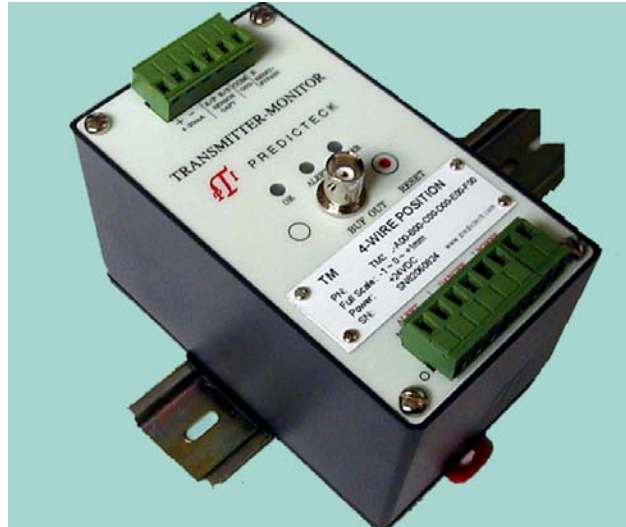
Output

- ✓ 4-20mA or 1-5V source.
- ✓ LED indication of system OK, Alert and Danger.
- ✓ Relay output of Alert and Danger (SPDT).
- ✓ Local and remote RESET/BYPASS.
- ✓ Buffered Output
- ✓ 24VDC, 110VAC or 220VAC

Specifications

Electrical

- Power Supply:
22-30VDC, 100mA (Non isolated).
90 - 250VAC, 50Hz or 60Hz, 50mA.
- Sensor Interface:
Sensitivity:
8.0 mV/um (200mV/mil).
- Connectors:
A/P: Power, -24VDC.
B/S: Signal.
COM: Ground and shield.
- Buffered Output:
Original vibration, un-filtered.
Nominal 2-18VDC.
Impedance: 100 Ω .
Maximum cable distance: 300m (1000ft).
Sensitivity: for 8mm or 5mm probes: 8.0 mV/um (200mV/mil) nominal. For 11mm probes: 4.0mV/um (100mV/mil).
- Overall Displacement:
4-20mA, source.
Driving load resistance up to 750 Ω .
1-5V, source.



- Output impedance 250 Ω .
- Alarm Setup:
0 ~ 100% FS.
Accuracy: ±0.1%.
- Relays:
Seal: Epoxy.
Capacity: 2A/220VAC or 2A/24VDC, resistive load.
Relay type: SPDT.
Isolation: 1000VDC.
- Factory Default:
Relay normally latched and de-energized.
Timed alarm defect is approx. 3 seconds.
Power-up inhibit is set to 10 seconds nominal.
- LED Machine Condition Indicator:
Green: Self-test passed, System works OK.
Yellow: Vibration over Alert level.
Red: Vibration over Danger level.
- RESET/BYPASS:
Local reset is on monitor front panel.
Remote RESET/BYPASS: Short the connector pin RESET and COM will engage system reset and bypass.

Physical

- Dimension: Height: 75mm (2.95"), see figuration.
Weight: 1.0kg (2.0 lb).

Environmental

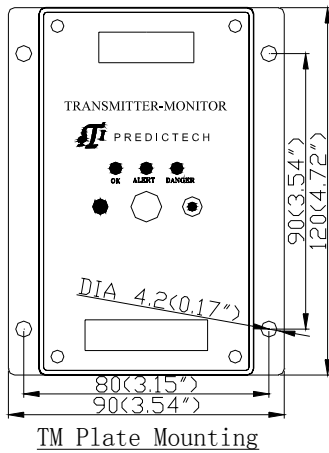
- Temperature:
Operation: -35°C ~ +70°C.
Storage: -40°C ~ +100°C.
- Humidity:
90% non-condensing.

Ordering Information

- Standard configuration:
TM202-A00-B00-C00-D00-E00-G00
- 8mm probe system:
TM0180-A07-B00-C05-D10
TM0181-A40-B00
TM0182-A50-B00-C00
TM202-AXX-BXX-CXX-DXX-EXX-GXX
- AXX: Full Scale.**
A00*: 1.0 ~ 0 ~ 1.0mm (require TM0180 or other 8mm proximity probe transducer; TM0105 or other 5mm proximity probe transducer)



Portable and Online Condition Monitoring Products



TM Plate Mounting

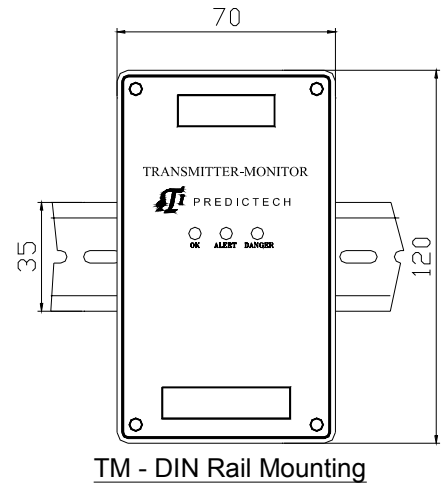
- A01: 2.0 ~ 0 ~ 2.0mm (require TM0110 or other 11mm proximity probe transducer)
- A02: 6.0 ~ 0 ~ 6.0mm (require TM0120 or other 25mm, 35mm proximity probe transducer)
- A03: 12.0 ~ 0 ~ 12.0mm (require TM0150 or other 50mm proximity probe transducer)
- A04: 40 ~ 0 ~ 40mil (require TM0180 or other 8mm proximity probe transducer; TM0105 or other 5mm proximity probe transducer)

- A05: 80 ~ 0 ~ 80mil (require TM0110 or other 11mm proximity probe transducer)
- A06: 0.25 ~ 0 ~ 0.25inch (require TM0120 or other 25mm, 35mm proximity probe transducer)
- A07: 0.5 ~ 0 ~ 0.5inch (require TM0150 or other 50mm proximity probe transducer)
- BXX: Power Supply.**
- B00*: +24VDC
- B01: 220VAC
- B02: 110VAC
- B03: 90~250VAC

- CXX: Alarm.**
- C00*: With Epoxy sealed relays
- C01: No Alarm
- DXX: Overall Vibration.**
- D00*: 4-20mA
- D01: 1-5V
- EXX: Buffered Output.**
- E00*: With Buffered Output
- E01: Without Buffered Output
- GXX: Mounting.**
- G00*: DIN rail mounting.
- G01: Plate mounting.

* Denote factory default.

TM202 Accessories



TM - DIN Rail Mounting

TM202 must work with proximity probe transducer.

- TM0180:** 8mm probe.
- TM0105:** 5mm probe.
- TM0110:** 11mm probe.
- TM0181:** Extension cable.
- TM0182:** 8mm/5mm driver.
- TM0112:** 11mm driver.
- TM900:** Power converter
- TM0200:** 3-1/2 digit display unit.
- TM0302:** Housing, for 2 TMs or 6 drivers.
- TM0306:** Housing, for 6 TMs or 16 drivers

TM202 Field-wiring Diagram

