



TM501 Transmitter-Monitor for Speed and Phase Reference

Condition Monitoring

- ✓ Measuring rotation machine speed.
- ✓ Output standard TTL speed and phase reference.
- ✓ System can be used in hazardous area.

Machine Type

- ✓ All kinds of rotation machines.

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.

Speed Response:

- 0 ~ 50,000 pulse per minutes.

Sensor Interface:

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

Connectors:

- A/P: Power, -24VDC.

- B/S: Signal.

- COM: Ground and shield.

Buffered Output:

- Original speed and phase, TTL.

- Nominal 0 ~ 5VDC.

- Impedance: 100 Ω .

- Maximum cable distance: 300m (1000ft).

Overall Speed:

- 4-20mA, source.

Driving load resistance up to 750 Ω .
1-5V, source.

Output impedance 250 Ω .

Alarm Setup:

0 ~ 100% FS.

Linearity: < 0.1%.

Relays:

Seal: Epoxy.

Capacity: 2A/220VAC or 2A/24VDC, resistive load.

Relay type: SPTD.

Isolation: 1000VDC.

Factory Default:

Relay normally latched and de-energized.

Power-up inhibit is set to 10 seconds nominal.

LED Machine Condition Indicator:

Green: Self-test passed, System works OK.

Yellow: Speed over Alert level.

Red: speed 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:

TM501-A01-B00-C00-D00-F00-G00

8mm probe:

TM0180-A07-B00-C05-D10

Extension cable:

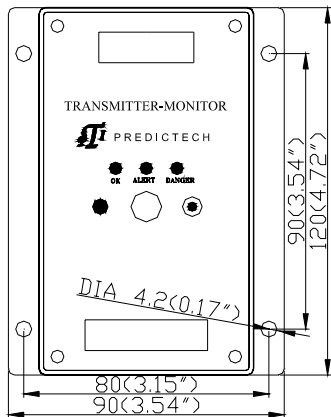
TM0181-A40-B00

Driver:

TM0182-A50-B00-C00



Portable and Online Condition Monitoring Products



TM Plate Mounting

- 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

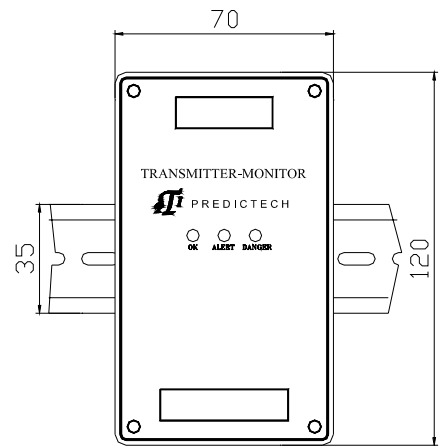
FXX: Teeth per Revolution.

- F00*: 1
- F02: Customer specify, number of teeth =XX

GXX: Mounting.

- G00*: DIN rail mounting.
- G01: Plate mounting.

* Denote factory default.



TM - DIN Rail Mounting

TM501-AXX-BXX-CXX-DXX-FXX-GXX

AXX: Full Scale.

- A00: 0 ~ 1,000 rpm
- A01*: 0 ~ 3,600 rpm
- A02: 0 ~ 6,000 rpm
- A03: 0 ~ 10,000 rpm
- A04: 0 ~ 30,000 rpm
- A05: 0 ~ 50,000 rpm

BXX: Power Supply.

TM501 Accessories

TM501 must works with proximity probe transducer.

TM0180: Probe.

TM0181: Extension cable.

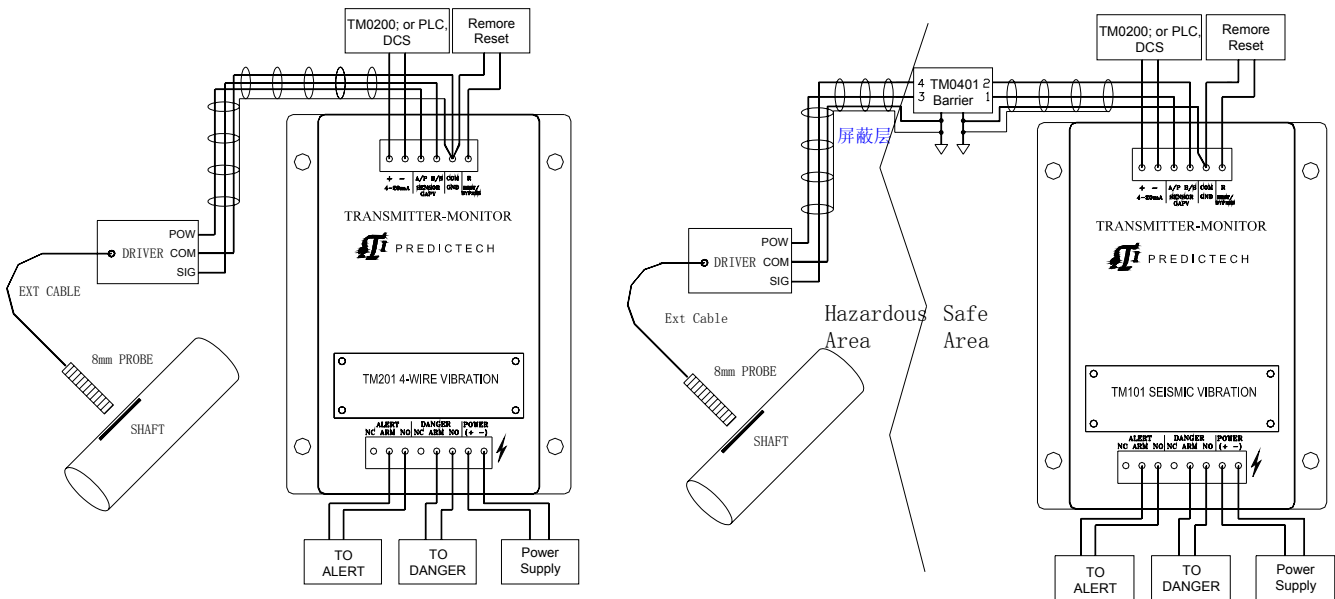
TM0182: Driver.

TM900: Power converter

TM0302: Housing, for 2 TMs or 6 drivers.

TM0306: Housing, for 6 TMs or 16 drivers.

TM501 Field-wiring Diagram





TM502 Transmitter-Monitor for Speed and Phase Reference

Condition Monitoring

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- ✓ Output standard TTL phase reference.

Machine Type

- ✓ All kinds of rotation machines.

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.



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

Remote RESET/BYPASS: Short the connector pin RESET and COM will engage system reset and bypass.

Specifications

Electrical

Power Supply:

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

Speed Response:

0 ~ 50,000 rpm.

Sensor Interface:

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

Connectors:

95 Ω coaxial connector.

Buffered Output:

TTL output for speed and phase.
Nominal 0 ~ 5VDC.
Impedance: 100 Ω .
Maximum cable distance: 300m (1000ft).

Overall Speed Output:

4-20mA, source.

Alarm Setup:

0 ~ 100% FS.
Linearity: < 0.1%.

Relays:

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

Factory Default:

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Power-up inhibit is set to 10 seconds nominal.

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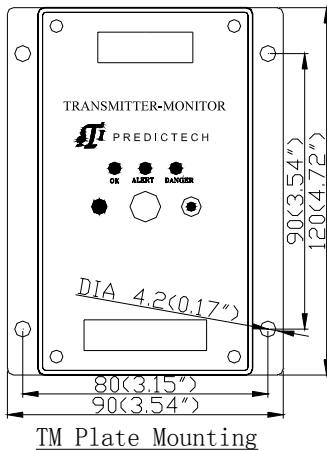
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Standard configuration:

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Portable and Online Condition Monitoring Products



8mm probe:

TM0180-A07-B00-C05-D10

Extension cable:

TM0181-A40-B00

Driver:

TM0182-A50-B00-C00

TM502-AXX-BXX-CXX-DXX-E XX-FXX-GXX

AXX: Full Scale.

A00: 0 ~ 1,000 rpm

A01*: 0 ~ 3,600 rpm

A02: 0 ~ 6,000 rpm

A03: 0 ~ 10,000 rpm

A04: 0 ~ 30,000 rpm

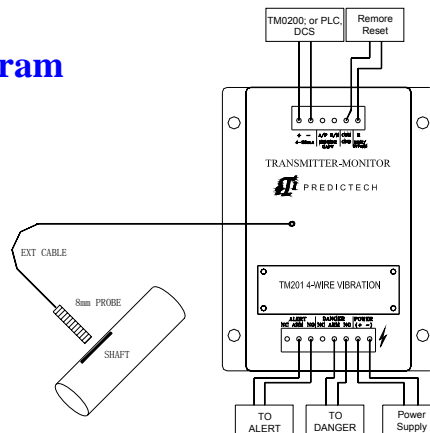
A05: 0 ~ 50,000 rpm

BXX: Power Supply.

B00*: +24VDC

B01: 220VAC

TM502 Field-wiring Diagram



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: Probe and Cable.

E00*: TM0180, 5m Cable

E01: TM0180, 9m Cable

E02: 8mm Probe, 3300, 5m Cable

E03: 8mm Probe, 3300, 9m Cable

E04: 8mm Probe, 7200, 5m Cable

E05: 8mm Probe, 7200, 9m Cable

E06: TM0105, 5m Cable

E07: TM0105, 9m Cable

E08: TM0110, 5m Cable

E09: TM0110, 9m Cable

E10: 11mm Probe, 3300, 5m Cable

E11: 11mm Probe, 3300, 9m Cable

E12: 11mm Probe, 7200, 5m Cable

E13: 11mm Probe, 7200, 5m Cable

FXX: Teeth per Revolution.

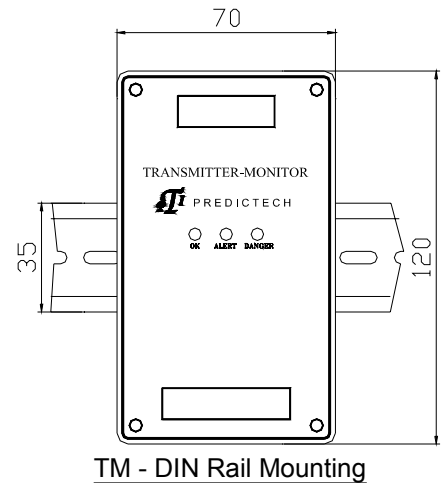
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