



YTM Series Digital-Transmitter-Monitor

YTM Series Digital Transmitter Monitor Introduction

Fully Digital

The YTM series digital transmitter monitor is ProvibTech's vibration monitor, vibration transmitter and vibration switch all combined into one package. Each YTM module can be operated independently or networked together to create a machine protection system. YTM contains redundant relay outputs and 4-20mA transmission. It can interface to a PLC or DCS system.

YTM has all the functionalities of an API 670 multi-channel monitor plus a unique field linearization feature which enables the use of any manufacturers' probe and extension cable combination. YTM modules are fully programmable, flexible, and highly reliable.

Fully Forward compatibility

YTM series Digital Transmitter Monitor can be compatible with TM Series Transmitter-Monitor. YTM monitor can replace each TM monitor in the field.

Highly Reliable System

The YTM was designed to be used for critical machines as well as balance of plant applications. Built into every YTM is a redundant system based upon a reliable microprocessor and proprietary system diagnostics which all contribute to a robust system design and maximize system uptime.

System Diagnostics –The YTM performs internal diagnostic tests to search for errors: sensor status, supply voltage, system power up, fieldbus status and more. If there is an error, the system OK status LED on the YTM will go off.

System Management –YTM391 module allow to manage all YTM modules in the system. YTM391 could display scrolling real time value, channel OK status and alarm information. In addition, it could driver the OK relay output.

Output Redundancy –The monitor contains redundant relay outputs.

Photoelectric isolation –Optoelectronic isolation is employed for power input, sensor signal conditioning and relay output.

System Centralized Management –YTM391

System Centralized Display –display scrolling real time value, channel OK status, alarm information and alarm event records.

System Centralized Control–centralized control reset, bypass and trip multiply of module through integrated port.

Configuration and Calibration- YTM391 can configure and calibrate each YTM module in the system.

Applications include

- Turbines
- Compressors
- Motors
- Pumps
- Fans
- Blowers
- Centrifuges
- Generators
- Turbochargers

Module Type

YTM series monitor with four different module types:

YTM301/YTM302/YTM305: Proximity Probe Sensor Module (work without Probe Driver)

YTM201/YTM202/YTM205: Proximity Probe Sensor Module (work with Probe Driver)

YTM101: Case Vibration Sensors Module

YTM391: System Integration Module

YTM301/YTM302/YTM305 is a proximity probe sensor module which provides measurements in radial vibration, axial position (thrust), and speed / phase reference. The YTM30X works with any proximity probe system combination (including other manufacturers) and can be used:

- Work without Probe Driver
- Compatible with any combination of probe and extension cable. The YTM30X has a field linearization feature which enables the YTM30X to interface to any proximity probe system. This feature greatly reduces the requirement for spare parts.



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- Works with any shaft material (Steel, Tungsten, K-monel and more).

YTM201/YTM202/YTM205 is a proximity probe sensor module which provides measurements in radial vibration, axial position(thrust), and speed / phase reference. The module works with any proximity probe system combination (including other manufacturers) and:

- Work with Probe Driver
- Works with any shaft material (Steel, Tungsten, K-monel and more).

YTM101 is a case mounted seismic sensor module which provides case vibration measurements in acceleration, velocity, or displacement. The YTM101 works with any case mounted sensor (including other manufacturers):

- Accelerometers
- Velocity Transducers

YTM391 is a system integration module which can be networked together with up to 8 YTM modules to create a machine protection system. YTM391 has the following functions:

- Display status of all modules in system.
- Calibrate 4-20mA output and adjust the Alarm and Danger set points of all modules in the field.
- Provides remote reset/bypass interface and remote trip multiply interface for all modules in system.
- Provides phase reference interface for all modules in system.

