## **IRD8100 MPT**

## **Machinery Protection Transmitter**

Wall Mounted Microprocessor Based Vibration Transmitter for Round-the-Clock Monitoring



Introduction: IRD8100 MPT is a Wall-Mountable Machinery Protection Transmitter (MPT) designed for Round-the-Clock Vibration Monitoring of Machines like Motors, Pumps, Fans, Compressors, Turbines and More. It has a rugged Al Die Cast Enclosure IP65 rated and thus can be mounted near the machine in harsh conditions. It is Microprocessor based with Password protection. It allows for changing of Units, Full Scale, Sensitivity, Alarm Setpoints and more via its Keypad. It provides industry standard 4-20 mA, MODBUS, Buffered and Phase Reference Outputs and Relay Contacts. It has an In-built Alphanumeric and Bargraph Display for displaying Live Vibration as value and Bars



## **Specifications:**

Power Input : 90 - 264 VAC, 50/60 Hz, Single Phase OR 127 - 370 VDC

Power Consumption : Regulated Power Supply makes 24 VDC using above and max consumption 1A (24W)

Sensor Input : Supports Vibration Sensor - Accelerometer mV/g or Velometer mV/mm/sec

Number of Channels : 2 Channels - Independent, Simultaneous and Programmable

Type of Measurement : Overall Vibration Amplitude in Acceleration, Velocity or Displacement

Max Vibration Acceleration : 10.00 g pk or 7.00 g RMS

Max Vibration Velocity : 150 mm/sec pk or 100 mm/sec RMS

Max Vibration Displacement : 1000 microns pk-pk

High Pass Filter : 5 Hz, 10 Hz and 20 Hz - selectable via Menu

Low Pass Filter : 1000 Hz, 5000 Hz and 10000 Hz - selectable via Menu

Current Output : 4-20 mA output proportional to Full Scale, 600 Ohms Load Resistance

2 Sets for Alarm Setpoint and 2 sets for Trip Setpoint per channel, rated for 5A at

230 V AC resistive

Measurement Accuracy : +/- 1% of Full Scale

Phase Reference Input

1 Channel Phase Reference Input using Non-Contact Eddy Current Based Sensor or

Laser Tachometer

Buffered Outputs

Buffered Time Waveform Output 1:1 for each Channel via BNC and Terminals.

Buffered Phase Reference Output via BNC

Display : In-Built Alphanumeric and Bargraph display for Live Vibration in Values and Bars

Enclosure Weight and Dimensions: Al Die Cast IP65 rated, 230 x 330 x 181 mm, 7.14 kg net weight

## **Additional Features:**

**Relay Contacts** 

- Quick viewing of Sensor and Cable Heathiness Voltage (Bias Voltage), set Alarm values, set Trip values, machine RPM (if Phase reference connected) and Firmware Version using NEXT Button
- Start-Up Protection with configurable Time Delay (Disables Tripping while in-progress to avoid false tripping during Start-Up). Dedicated Trip Bypass mode to prevent tripping at all times
- Configurable Relay for both Alarm and Trip. Configurable for Setpoint, Time Delay, Latching, Hysterisis and more
- MODBUS RTU as well as MODBUS TCP/IP Output configurable for Module Address, Baud Rate and Parity

How to Order: Contact sales@irdmech.com for a quote for complete system - Sensors, Cables and Transmitter

