



# Vibration Monitoring via IRD7200 Machinery Signal Transmitter (MST)

Casing Vibration | Shaft Vibration

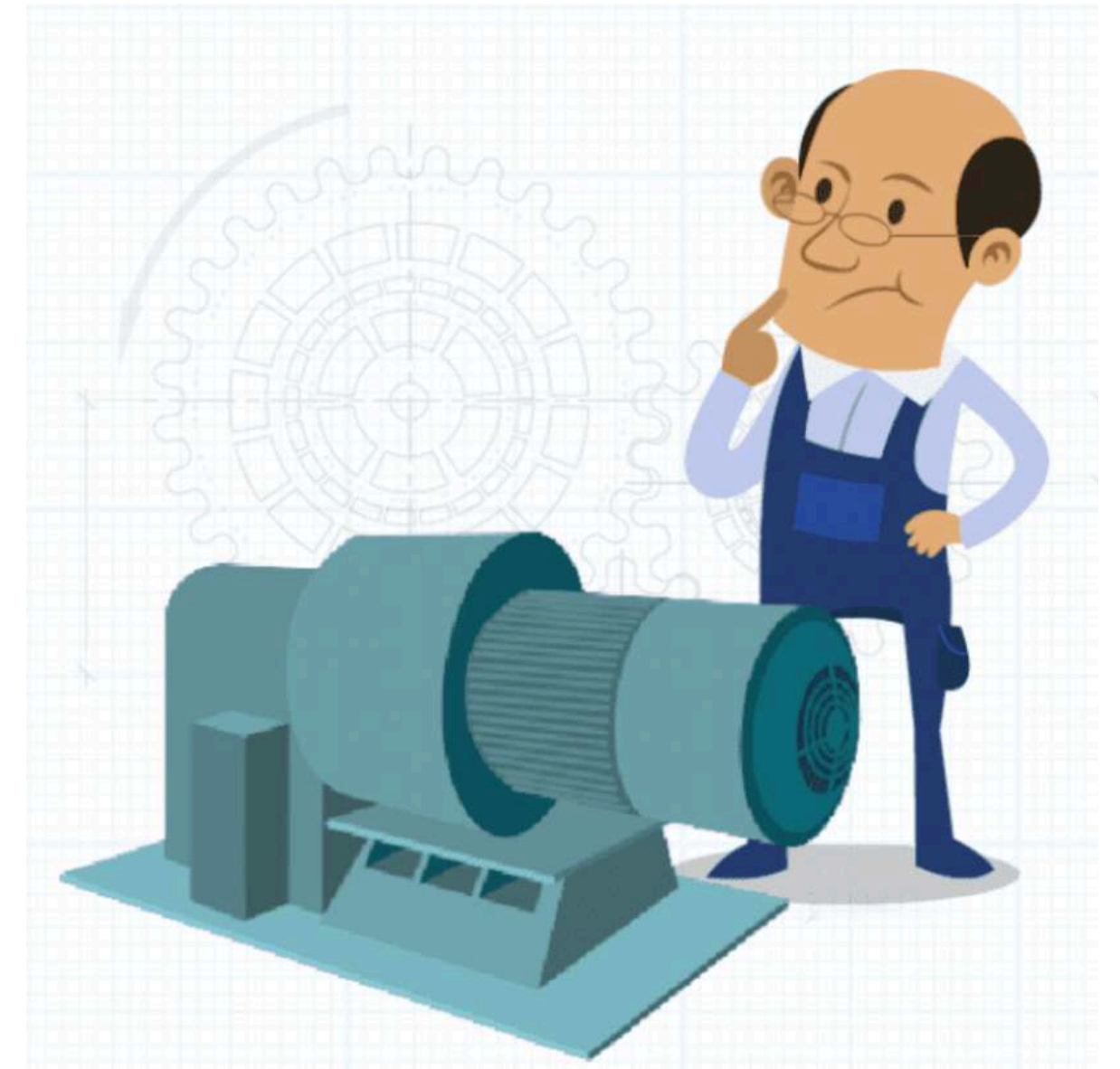
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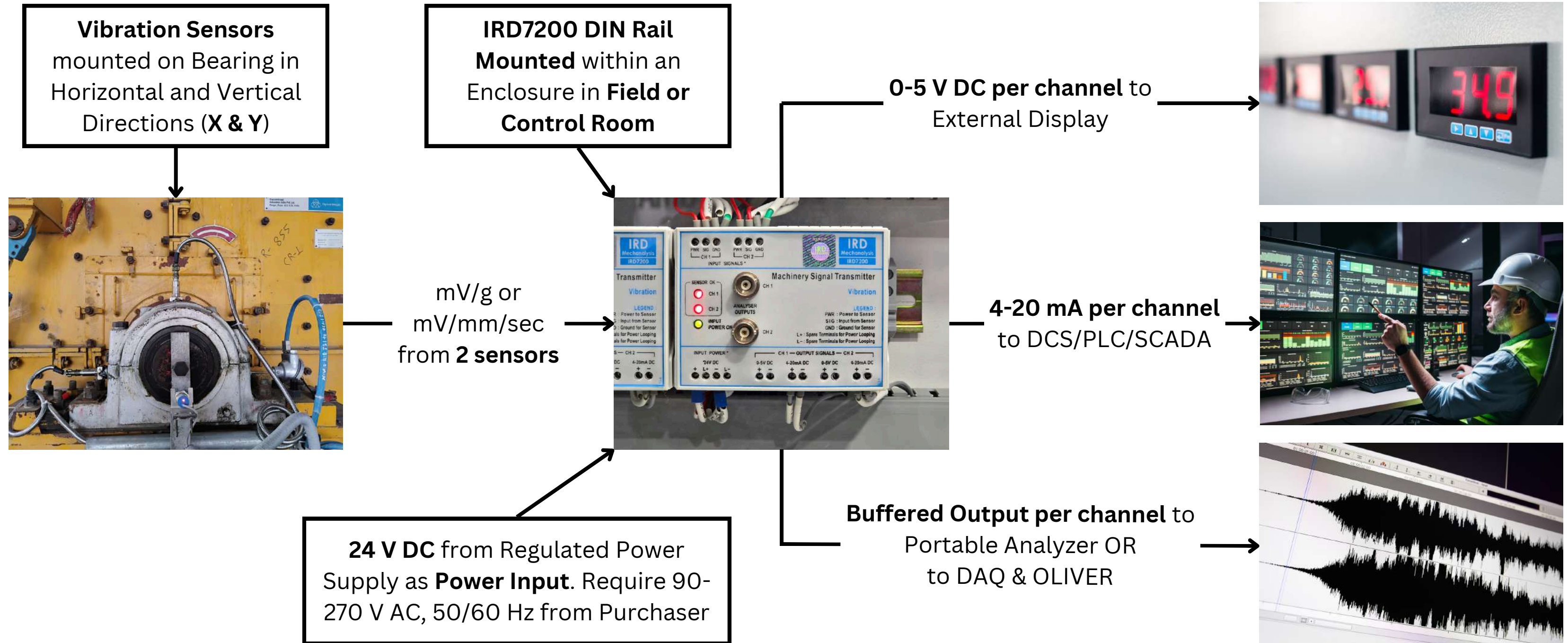
# Why Vibration Monitoring?

- **Every Machine Vibrates** when it Runs
- Any increase in Vibration is a **sign of Trouble**
- Problematic Vibration can come **Announced or Unannounced**
- Monitoring Vibration helps protect from Problematic Vibration and **Reduce Downtime**

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# Vibration Monitoring via IRD7200



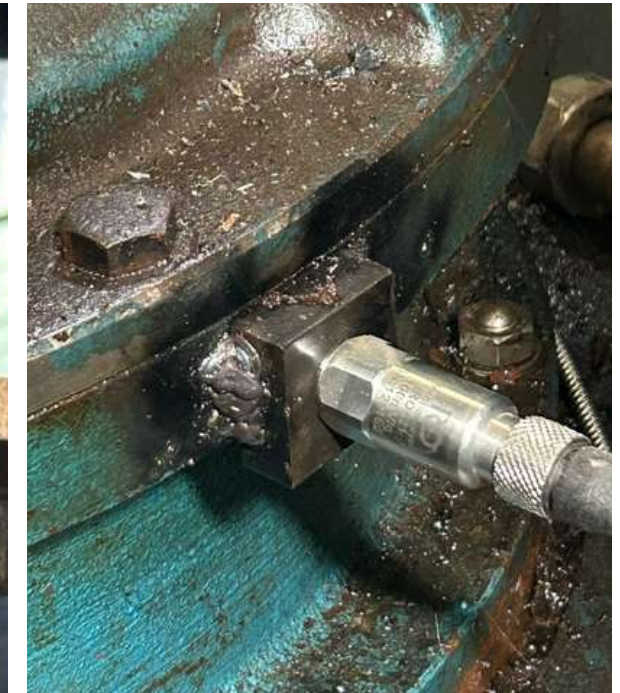
# Choosing right Sensor

- Use **Accelerometer** 100mV/g or **Velometer** 4mV/mm/s for Casing Vibration
- Use **Non-Contact Eddy Current** based Sensor 8mV/ $\mu$ m for Shaft Vibration
- Consider Frequency Response, Temperature Response, Sensitivity and Accuracy while choosing sensor
- We help in choosing the right sensor for the application



# Choosing right Mounting Accessory

- Use Mounting Pad and Stud when Tach welding is possible
- Use Stud directly if Thread tapped hole present
- Use Magnet when temporary mounting
- Use Adhesive if Welding, Drilling, Tapping is not possible
- Use Bracket for Non-Contact Eddy Current Sensor



# Choosing right Cable

- Use Cable of Sufficient Length - extra length is always better
- Teflon Cable in SS Conduit is Best and Popular Stock option
- Use PVC conduit for Excessive Corrosive environment
- Go for Moulded Connector for Sensor as far as possible for Ingress Protection
- Let IRD team help choose



# Choosing right Field Mounted Enclosure

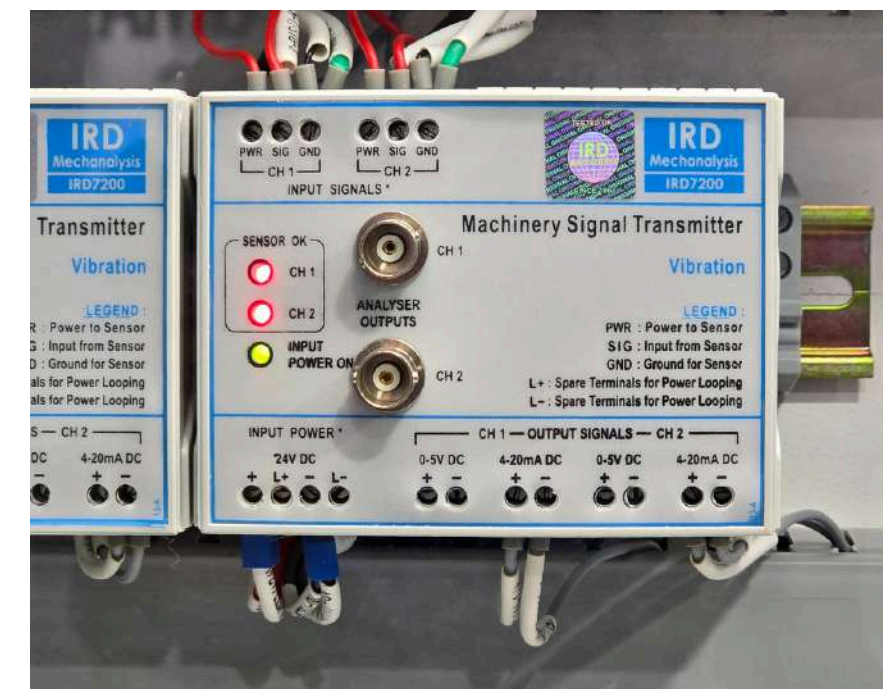
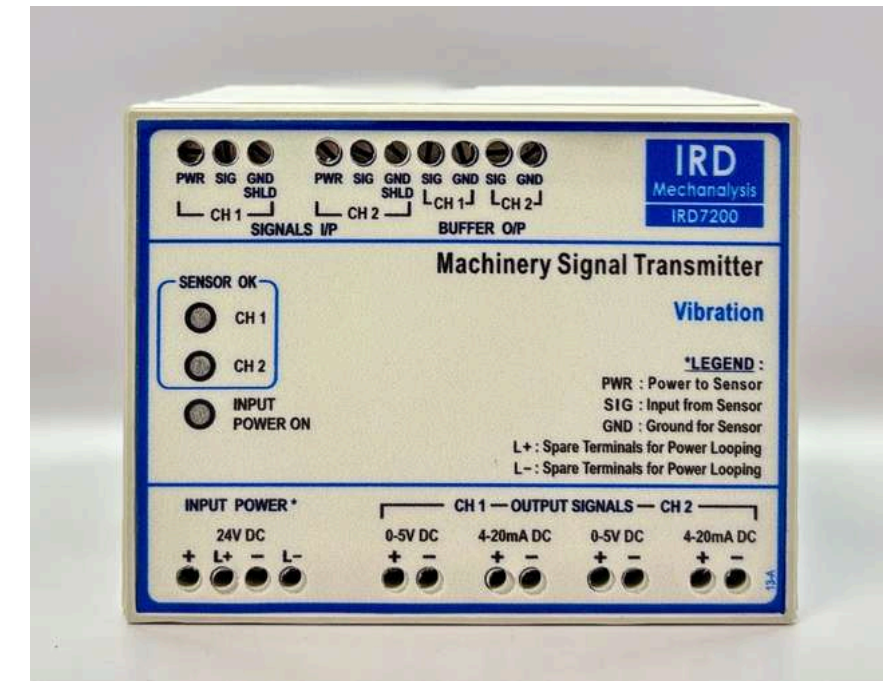


- Choose ABS or Polycarbonate for Low Cost
- Choose FRP or SS for superior Corrosion Resistance
- Choose CRCA for Bigger Sizes
- **Explosion Proof options** also available for use in Hazardous Areas like Zone 0, 1 and 2
- We help choose material and dimension based on required Inputs and Outputs



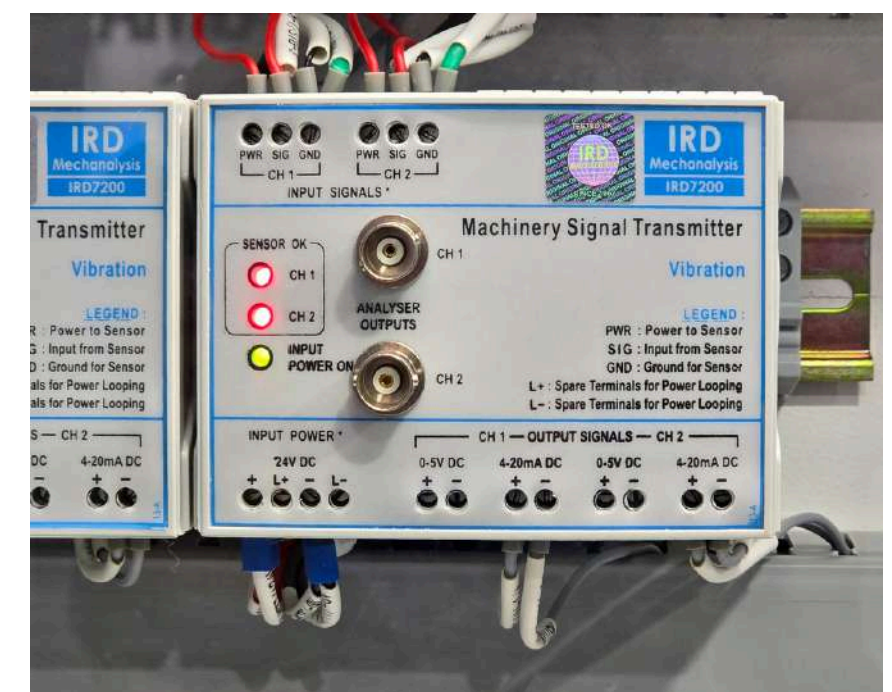
# Choosing right IRD7200 Variant

- Available in 2 Variants - with **Buffered Output** on **BNC** and other with Buffered Output on **Terminals**
- Available in **Single Channel** (25 mm width) and **Dual Channel** (100 mm width) variants. Standard 35mm **Din-Rail mounted** enclosure
- Part Number depends on Number of Channels, Sensor Input Type, Full Scale Requirement and Buffered Output choice



# Outputs of IRD7200 MST

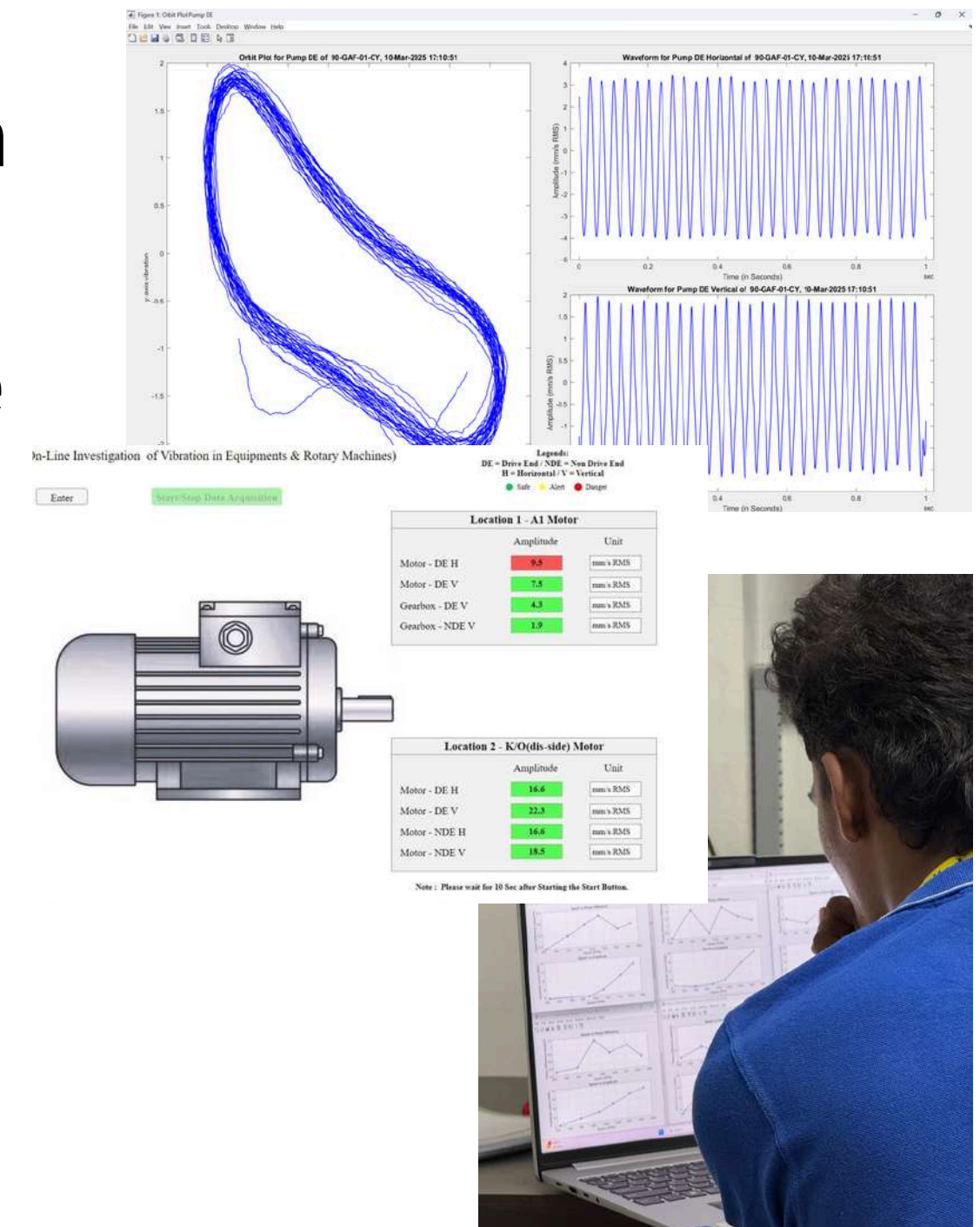
- **LED** indicating **Power and Channel Healthiness**
- **Screw Type Terminals** for Power Input, Sensor Input and Outputs
- **4-20 mA DC Output** Linear and Proportional to Full Scale Range. Loop Resistance 600 Ohms
- **0-5 V DC Output** Linear and Proportional to Full Scale Range. Loop Resistance 1000 Ohms
- **1:1 Buffered Output** on BNC or Terminals - as ordered



# Expanding the Abilities of IRD7200 MST



- By use of 4-20mA to MODBUS RTU or TCP Converters - the data of IRD7200 can be taken to **OLIVER** (On-Line Investigation of Vibration in Equipments and Rotary Machines) Software for Viewing, Trending and Reporting
- By use of Data Acquisition Hardware like NI cDAQ - the Buffered Output can be used for Generating **Vibration Analysis Plots** like Waveform, Spectrum, Orbit and More



# Customer Confidence

- IRD7200 MST being used for **Vibration Monitoring** in Power Plants, Refineries, Steel Plants and **almost all Sectors**
- **5 Years Warranty** from date of Purchase
- **Made in India.** Service Center in India for After-Sales Service



# About IRD Mechanalysis Limited



- Provider of **Condition Monitoring Solutions** to the World **since 1962**. Solutions include **Portable Instruments** and **Online Systems** for **Vibration, Temperature, Speed, Gap, Bearing** and **Turbine Monitoring**
- **Associated Services** - Training, Consulting, Commissioning, Repairs and Calibration
- Popularly known as '**The Vibration People**'

