

Portable Instruments

Vibration Meters | Calibration Tools | Fault Simulation & Training

Made in India by IRD Mechanalysis Limited - Condition Monitoring Solutions provider since 1955



>> Helping Turn Maintenance into a Profit Center

WHY PORTABLE INSTRUMENTS?

Every rotating machine - motor, pump, fan, blower or compressor - tells you how healthy it is through its vibration. Portable instruments let your maintenance team listen in, every day, without stopping production.

1. Catch faults early -

Rising vibration is often the first sign of unbalance, misalignment, looseness or a failing bearing. Measure it before it becomes a breakdown.

2. Reduce unplanned downtime -

Quick routine checks support preventive and predictive maintenance, so repairs are planned instead of forced.

3. Know your bearing health -

Spike Energy (gSE) measurement helps spot early anti-friction bearing problems and plan bearing maintenance.

4. Measure against standards -

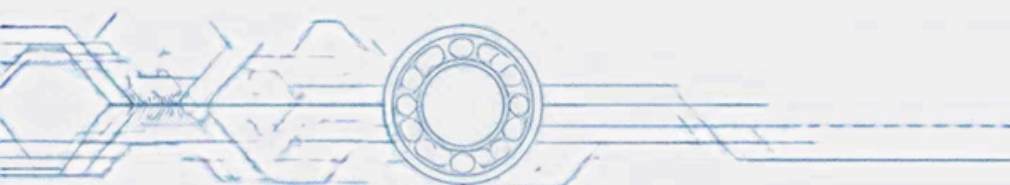
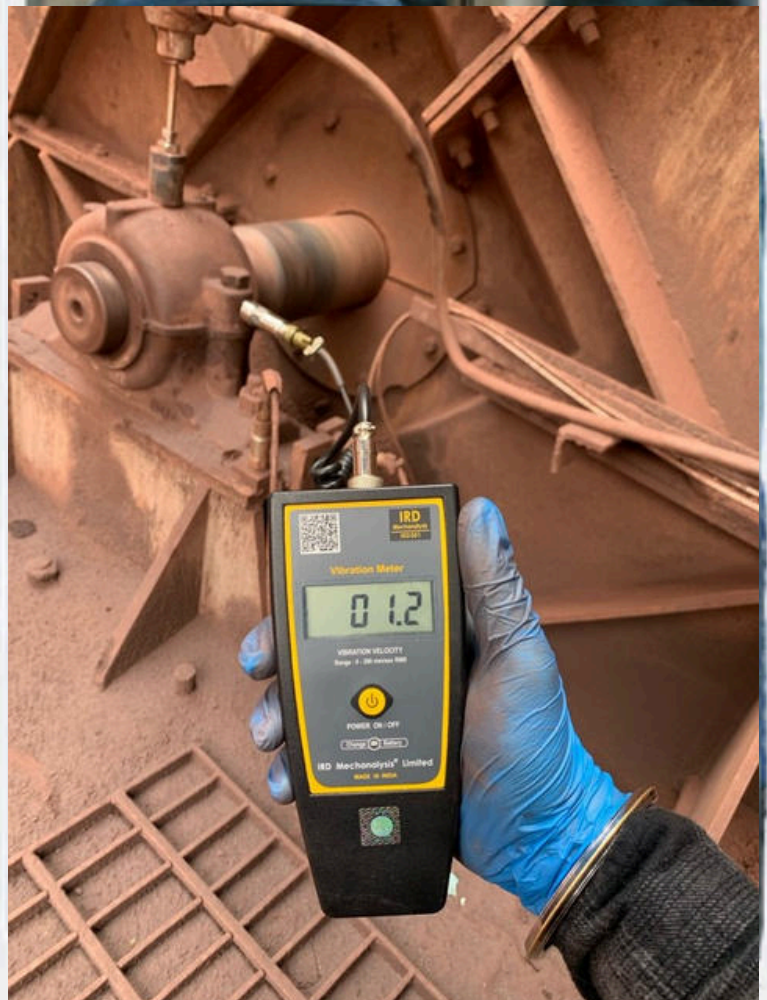
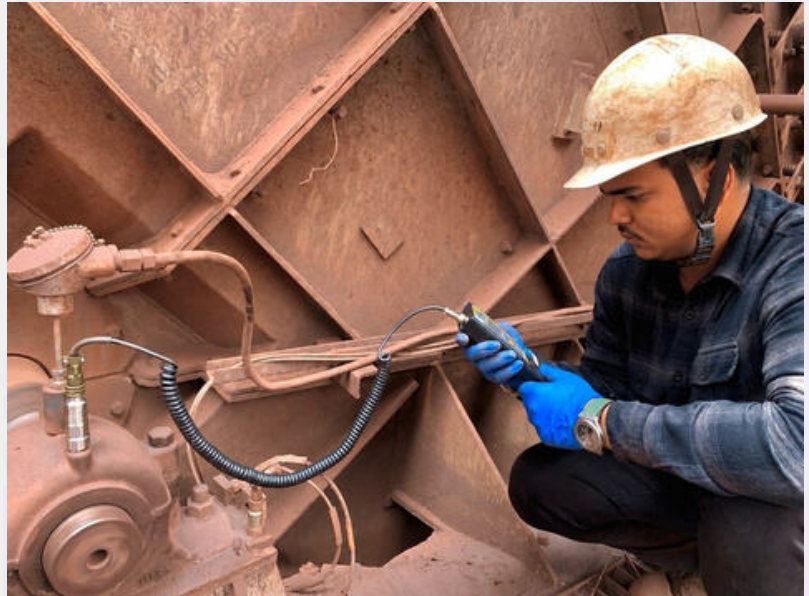
Compare readings with ISO 20816-1 vibration severity limits for different machine classes.

5. Trust every reading -

Portable calibrators and shakers let you check meters and sensors on site; ISO recommends an annual calibration check of test and measurement instruments.

6. Build skilled teams -

Fault simulation demo units let engineers see, measure and understand real machine faults during training.



DIGITAL VIBRATION METERS



IRD301 Lite

Simple, low-cost entry-level vibration meter.

- Vibration velocity 0-200 mm/s RMS (10 Hz - 1 kHz)
- One-button operation with low-battery indication
- Easy-to-read 3 1/2 digit LCD with QR code for help
- Works with IRD521 100 mV/g accelerometer
- Rugged, ideal for bulk deployment to plant teams.



IRD306DP Plus

Velocity and displacement in one easy meter.

- Velocity 0.1-200.0 mm/s RMS
- Displacement 1-2000 μ m pk-pk
- Sunlight-readable 3 1/2 digit LCD
- ISO 20816-1 chart on front panel
- Kick stand for hands-free readings
- 2 years warranty.



IRD811D Pro

Vibration meter and Spike Energy detector.

- Displacement up to 2000 μ m pk-pk
- Velocity up to 200 mm/s RMS
- Acceleration up to 20 g pk
- Spike Energy up to 20 gSE for bearing condition
- Membrane keypad, 2 years warranty.



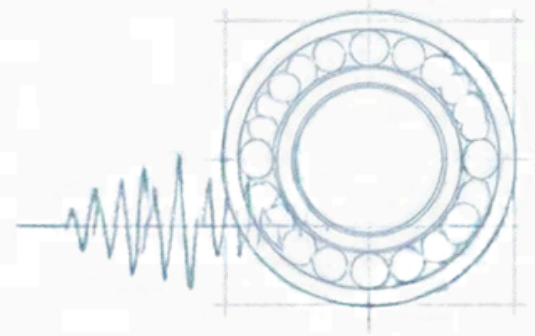
IRD202 Elite

Vibration meter and bearing health checker with memory.

- Acceleration, velocity and displacement (RMS, peak or pk-pk; metric or imperial)
- Spike Energy (gSE) for early bearing faults
- Date/time-stamped memory
- USB-C transfer to IRD202 Data Explorer with Excel export
- 4000 mAh Li-Po battery charged over USB-C.

ANALOG METERS AND VIBRATION ANALYSIS

The moving needle gives an intuitive picture of vibration and is still preferred by seasoned vibration analysts.



IRD306 Analog

Rugged analog vibration meter built to last decades.

- Velocity in mm/s peak
- Displacement in microns pk-pk
- Works with IRD531 sensor
- Kit includes 2 coiled cables, 2 rechargeable batteries, charger, stinger and carry bag.



IRD811 Analog

Analog vibration meter cum Spike Energy detector.

- Acceleration g pk, velocity mm/s pk and RMS, displacement μm pk-pk
- 1400 CPM filtered displacement mode - useful for offshore and marine measurements
- Spike Energy (gSE) for rolling-element bearing condition
- Battery check function, runs on 9V battery.



IRD101

2 Channel Vibration Analyser & Balancer

- Route-based data collection
- Works with "Data Acquisition & Analysis" PC software over USB: download route plans, upload data
- Colour screen, F1-F5 function keys and full keypad
- Complete kit in a rugged carry case: sensors, cables, magnetic base and stand, power adapter and digital scale



CALIBRATION CHECKING AND FAULT SIMULATION



Portable Calibrator (IRD CAL)

Check vibration meter calibration on site in minutes.

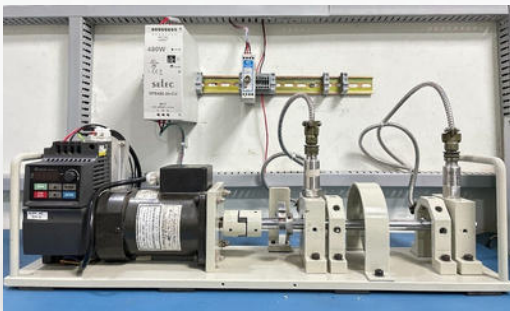
- Generates a pure sine wave at 100 Hz
- 70.7 mV AC RMS to simulate 100 mV/g sensors
- 44.14 mV AC RMS to simulate 4 mV/mm/s sensors
- Expected-reading chart on the calibrator body
- Runs on a single 9V battery.



GJX-3 Shaker

Portable shaker for single-sensor calibration checking.

- Made by Beijing Sendig - IRD is the distributor in India
- Knobs to control vibration amplitude and frequency
- Checks one vibration sensor at a time
- Suitable for contact and non-contact vibration sensors.



Motor Demo with Fault Simulation

Hands-on training and demonstration rig.

- Simulate unbalance, misalignment, looseness, bent shaft, bad bearing and more
- VFD speed control 0-50 Hz (up to 3000 RPM)
- Mounting for contact and non-contact vibration sensors
- Measure casing vibration, relative and absolute shaft vibration, phase reference and speed
- Packed in a wheeled hard suitcase - travels by flight, train or car.

More than instruments



Repairs and Calibration -

Repair and calibration service for IRD-manufactured instruments, with yearly calibration reminders.



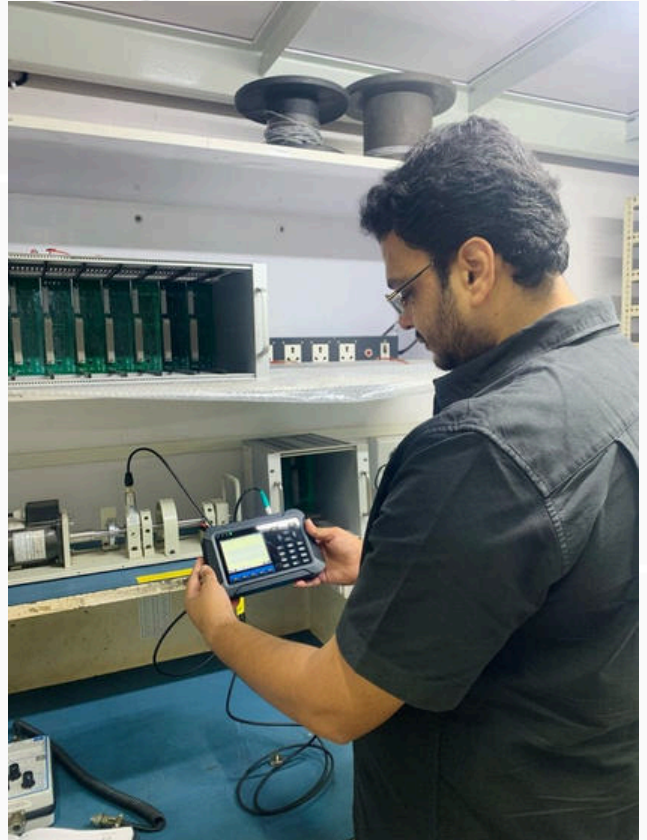
Training -

Courses on vibration analysis, condition monitoring, RCM and dynamic balancing, including online Vibration Analysis Category II training.



Instrument Demonstration -

See the instruments working on real machines before you buy.



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