

The IRD Mechanalysis model IRD811D portable digital vibration meter is suitable for most industrial applications with an easy to read digital display. Hand held it measures machinery vibration in terms of displacement (microns), velocity (mm/sec), acceleration (g) and Spike Energy™ (gSE™). Its integrated circuit technology provides wide dynamic range and long battery life.

From precision bearing inspection to plant-wide maintenance, the IRD811D has the sensitivity for measuring fractions of a micrometer to 2000 microns. Also, the widely acclaimed IRD Spike Energy™ (gSE™) circuit is included. The broadband measurement of gSE™ enables detection and measuring of “bursts” of spike energy at ultrasonic frequencies. Bearing defects developing such as micro spalls, cracks and lack of lubrication can be quickly identified thus preventing unscheduled plant outage.

BILL OF MATERIALS	Qty	Part Number
IRD811D Digital Vibration Meter	1	M81102
Accelerometer Multi-purpose, model IRD511 - 100 mV/g, 2.0 Hz - 10 kHz, top connector	1	M51100
Cable Assembly for model IRD811D to IRD511 Accelerometer sensor - 1.2m (4ft), rubber insulated, shielded	2	M60022
Magnetic Portable Base, IRD500 Series Accelerometers	1	M24828
Stinger, Al 225mm long for Sensor	1	M24827
Carrying Case	1	M25346
Battery Set, 2 Nos. of 9V, 100mAH Dry Cells	1	M30642
Manual Operating	1	M43082
Optional Accessories		Part Number
Shaft Fish Tail Stick - Absolute Vibration for IRD544		M24824
Manual Training - IRD MVT 1		M51001



**SPECIFICATION**

**Measurement Ranges**

- Displacement: - 20 microns, 200 microns, 2,000 microns pk-pk
- Velocity: - 20 mm/sec, 200 mm/sec, 2,000 mm/sec pk
- Acceleration: - 20 g, 200 g, 2000 g pk
- Spike Energy™ RMS: - 20 gSE™, 200 gSE™, 2000 gSE™
- Available on request

**Frequency Range**

- Displacement: - 300 CPM to 24,000 CPM (5 Hz to 400 Hz)
- Velocity: - 300 CPM to 150,000 CPM (5 Hz to 2,500 Hz)
- Acceleration: - 300 CPM to 600,000 CPM (5 Hz to 10,000 Hz)

**Accuracy**

- Instrument: - 1% of Full Scale Reading (FSR)

**Input / Output**

- Input: - Accelerometer
- Output: - LC Digital Display (3½ Digit)

**Power Requirements**

- Internal Batteries: - Battery Set, 2 Nos. of 9V, 100mAH Dry Cells

**Environmental**

- Operating temp: - 0°C to +55°C
- Storage temp: - -18°C to +60°C

**Weight & Dimensions**

- Instrument only: - 0.4Kg, 175mm (L) x 80mm (W) x 54mm (H)
- Carrying Case: - 2.0 Kg (inc. meter and standard accessories)

The **Vibration People** of IRD Mechanalysis can be contacted at the following branches or your local distributor:

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IRD Mechanalysis Ltd. strives to continue to improve the above specification and retains the right to change them without notice