2-Axis

Professional Precision Digital Level with Vibrometer

Innovation & Technology Driven™

Advanced Digital MEMS Technology

Traditional Pendulum/Vial methods

Products tested by TÜV SÜD, SGS accredited body to comply with CE, FCC & RoHS, and traceable to UKAS, JIS, NIST & DIN, and manufactured under SGS certified ISO quality standards:
DWL3000XY and DWL3500XY is a 2-Axis High Precision Digital Level & Machinist Level with built-in Vibrometer. These digital levels are embedded with advanced MEMS sensor technology, designed for professional & trade specialist to achieve high accuracy and simultaneous display of angular & vibration measurements. DWL2000XY is an affordable model introduced with basic features.

These digital levels are capable of remote real-time data acquisition, logging & analysis when in sync with PC. It is highly effective when used for installation, setting up and maintenance of high precision CNC machines, test and measuring equipment.

**Device Overview**

- 2-Axis colour graphic display of angular & vibration measurements
- Real-time digital & analogue display for data logging & analysis
- High resolution of 0.01°(175 µm/M) or 0.001°(18 µm/M) (3.6 arcsec.)
- Built-in Vibrometer for real-time vibration measurement.
- Wireless/USB connectivity for remote data logging & analysis.

**Device Features & Icons**

- **ANGLE METER**
  
  Real-time colour graphic display for Single/Dual Axis digital & analogue angle measurements & data acquisition, logging on device screen/PC monitor.

- **VIBRO METER**
  
  Real-time colour graphic display for vibration measurement and data logging on device screen/PC monitor.

- **ALTERNATE ZERO SETTING**
  
  Enable user to measure relative angles at a common plane with respect to a reference angle set to zero.

- **ABSOLUTE LEVEL SETTING**
  
  Enables user to perform absolute symmetry readings for both "front" & "reverse" (180 degrees) positions of any measurement angle.

- **SETTING MENU**
  
  Enable User to define various parameters on the device functions.

- **WIRELESS SYNC (Optional)**
  
  Wireless Sync to computer/tablet/smartphone for remote measurement, data acquisition, logging & analysis.

- **TEMPERATURE COMPENSATED**
  
  These instrument/device are temperature calibrated for the entire specified operating temperature range.

**Device TFT LCD Displays**

- 3-Points Contact Base
PC Sync Software / Android Apps Sync

Software Features

- User-Friendly “Plug & Play” USB Connection for angle & vibration remote measurement, data acquisition, logging & analysis in computer.
- Bluetooth Connectivity (Optional) for wireless remote data acquisition, monitoring & logging.
- Mobile Android Apps “Digi-Pas Level Sync” in Android Tablet and Smartphone.

Advantages of 2-Axis Digital Level

- **SPEED & PRECISION**
  Instant 2-Axis simultaneous digital display of high resolution & accuracy providing a comprehensive solution for levelling, alignment & vibration measurements resulting in time saving and quality professional works.

- **CLARITY**
  Digital colour graphic & numeric display to enable real-time collection & storage of digital angle/levelling/alignment data for machine commissioning accountability & analysis.

- **EFFECTIVE**
  The remote reading Wireless/USB Cable capability via PC/Tablet/Smartphone providing advantages that traditional single axis spirit level is difficult or unable to match. i.e. effectively, only one person is required to level/align a machine.

- **ACCREDITATION**
  Instrument accuracy is verified by accredited 3rd party Calibration & Test Service Providers in USA, Japan, UK & Germany and traceable to NIST, JIS, UKAS & DIN under ILAC & A2LA.
## TECHNICAL SPECIFICATION:

<table>
<thead>
<tr>
<th>Model</th>
<th>DWL2000XY</th>
<th>DWL3000XY</th>
<th>DWL3500XY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measurement Range</strong></td>
<td>0.00° to ± 90.00°</td>
<td>0.00° to ± 90.00°</td>
<td>0.000° to ± 20.000°</td>
</tr>
<tr>
<td><strong>Measurement Range</strong> (Dual Axis Mode)</td>
<td>0.00° to ± 3.00°</td>
<td>0.00° to ± 15.00°</td>
<td>0.000° to ± 10.000°</td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>0.01° (175µm/M) (0.002 in/Ft)</td>
<td>0.01° (175µm/M) (0.002 in/Ft)</td>
<td>0.001° (18µm/M) (0.0002 in/Ft)</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>± 0.02° at 0.00° to ± 2.00° (349 µm/m) (0.004 in/Ft) (72 arcsec.) ± 0.04° at other angles</td>
<td>± 0.01° at 0.00° to ± 10.00° (175µm/M) (0.002 in/Ft) (36 arcsec.) ± 0.03° at other angles</td>
<td>± 0.001° at 0.000° to ± 2.000° (18µm/M) (0.0002 in/Ft) (3.6 arcsec.) ± 0.003° at other angles</td>
</tr>
<tr>
<td><strong>Repeatability</strong></td>
<td>0.01° (175µm/M) (0.002 in/Ft)</td>
<td>0.01° (175µm/M) (0.002 in/Ft)</td>
<td>0.001° (18µm/M) (0.0002 in/Ft)</td>
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<tr>
<td><strong>Measurement Speed</strong></td>
<td>≤ 3 Sec.</td>
<td>≤ 3 Sec.</td>
<td>≤ 5 Sec.</td>
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<tr>
<td><strong>Vibrometer (Relative g)</strong></td>
<td>-</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Magnet</strong></td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>Colour TFT LCD</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>4 x AAA 1.5V Batteries / USB</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Material</strong></td>
<td>PC ABS / Aluminium</td>
<td>PC ABS / Cast Iron</td>
<td></td>
</tr>
<tr>
<td><strong>Connectivity</strong></td>
<td>USB 2.0 Cable (≤ 5 Meter)</td>
<td>USB 2.0 Cable (≤ 5 metre) Bluetooth Industrial Class 1 (≤30 metre) (Optional)</td>
<td></td>
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<tr>
<td><strong>Operating Temperature</strong></td>
<td>-10°C to +50°C (Calibrated for the entire temperature range)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Storage Temperature</strong></td>
<td>-20°C to +60°C</td>
<td></td>
<td></td>
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<tr>
<td><strong>Dimension (mm)</strong></td>
<td>188 x 62 x 37</td>
<td></td>
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<tr>
<td><strong>Nett Weight (Approximate)</strong></td>
<td>580 gram</td>
<td>1100 gram</td>
<td></td>
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<tr>
<td><strong>User Self Calibration</strong></td>
<td>Yes</td>
<td></td>
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<tr>
<td><strong>Note</strong></td>
<td>* Alternative device power can be obtained from External USB Power Source</td>
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### Applications:

- Biomedical & Pharmaceutical
- CNC Machine Alignment
- CMM Levelling (Metrology)
- Research Laboratory
- Semiconductor Production Machines
- Aerospace & Defence
- Railway & Transportation System

Authorized Distributor:

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