

Ultrasonic Hardness Tester Integrated Design + Two Probes

Product Description

LABWAN Ultrasonic Hardness Tester uses the UCI method for accurate, non-destructive hardness testing with minimal indentation. With 20N test force, two probes, multiple hardness scales and IPS display, it is suitable for metals, thin/precision parts, coatings, gears, shafts, moulds, dies and heat-treated components, making it ideal for quality control, manufacturing, laboratories and on-site testing.

Features

- Portable size, easy to carry
- Small indentation, non-destructive measurement
- Easy operation for measuring flat, small, or irregular parts
- High precision and good repeatability



Parameter Name	Specification
Product Name	Ultrasonic Hardness Tester
Model Name	LWUT-132
Hardness Scales	HV、HRC、HRB、HRA、HS、HL、HB、HRE、HRF
Measurement Range	HV(50-1700), HL(170-960), HRC(20-70), HRB(13-100), HRA(60-85.8), HS(26.4-99.5), HB(30-651), HRE(20-70), HRF(60-100)
Resolution	1HV, 0.1HRC
Accuracy	± 4%H+10HV, ±2.5HRC (Probe fixture stand test, H as the standard value)
Repeatability	3%H+8HV, 2HRC (Probe fixture stand test, H as the standard value)
Test Force	20N
Display	240 * 240 dot matrix IPS
Power Supply	Rechargeable lithium battery 3.7V@1000mAh, full charge for over 5000 continuous measurements
Charging Port	USB(Type-C)
Size	185*43*45 mm
Weight	245 g
Working Temperature Range	-10~50°C, 0~85% RH (no condensation)
Storage Temperature Range	-10~60°C, 0~85% RH (no condensation)
Supply Voltage	DC5V
Operating Current	60mA

Uses & Applications

- Hardness testing of metals, alloys & components
- Testing of thin, small & precision parts
- Inspection of coatings & hardened layers
- Testing of flat, curved & irregular surfaces
- Quality control & heat-treatment verification
- Inspection of gears, shafts, moulds & dies
- Suitable for laboratories, workshops & field testing



Characteristics

- **Minimal Indentation for Non-Destructive Testing**

Utilizing the ultrasonic contact impedance (UCI) method, the test leaves only tiny indentations, preserving the surface of precision or finished parts while delivering accurate hardness measurements.

- **Measurable Ultra-Thin Materials**

The instrument can also perform accurate and non-destructive measurements on ultra-thin workpieces (if the sample does not meet the minimum mass of 300g and a minimum thickness of 5mm, grease can be used to couple the sample to a sturdy support for testing).

- **Two Probes for Versatile Applications**

Equipped with dual probes, the instrument adapts flexibly to a variety of hardness testing needs. Whether testing flat surfaces, small components, or irregularly shaped parts, it ensures accurate and reliable measurements.