

HST-L-V6 Portable Rapid Oil Quality Analyzer



The HST-L-V6 portable rapid oil quality analyzer employs tuning fork sensing technology and micro-rapid heating temperature control technology, achieving precise temperature control of 40°C/100°C. It consists of an ARM high-performance processor, a fluid characteristic sensor, a 7-inch resistive touch LCD, a USB interface, a thermostat, a built-in power supply, and a printer. By sampling in-use lubricating oil, it conveniently, quickly, and stably measures the kinematic viscosity, density, dielectric constant (oil quality), temperature, water activity, and water content parameters. It accurately measures various physicochemical indicators of oil degradation, providing a basis for rapid on-site evaluation of equipment lubrication health. This enables scientific oil change based on quality using a low-cost and simple method, extending lubricating oil service life, detecting equipment failures early, and avoiding significant losses.

Feature:

- **High Measurement Accuracy:** Measurement accuracy is highly consistent with large laboratory instruments. An integrated heating module provides precise measurement of physicochemical properties of oil at standard temperatures of 40°C and 100°C.
- **Simple Operation:** A touchscreen display and operation prompts assist in the entire measurement process. The Chinese interface allows users to simply prepare the oil sample and follow the operation wizard to obtain the results.
- **Compact and Lightweight:** Powered by a lithium battery, posing no high-voltage hazard to operation or the instrument. The built-in battery (working time not less than 4 hours) makes it easy to carry and allows for rapid on-site oil quality testing.

- Enables trend analysis to observe changes in oil physicochemical properties.
- Real-time display of oil status.
- Built-in memory for convenient data storage.

Technical Parameter:

Screen	7-inch screen
Heating Module	Built-in 40℃/100℃ heating module
Accuracy	≤ 3% (after calibration)
Repeatability	≤ 3% (typical)
Temperature Control Accuracy	±0.1℃
Measurement Time	30 seconds
Operating Temperature	-10-100℃
Operating Humidity	Up to 90%, non-condensing
Trend Analysis	With curve display and multi-curve comparison analysis of different samples
Battery	Built-in rechargeable lithium battery for mobile operation

load cell Parameter:

Measurement parameters:	Measurement range,	Resolution	Measurement Accuracy
Temperature	0~100℃	0.1℃	±0.3℃ (25℃)
Dynamic viscosity	1~400cP	0.1cP	±5%
Density	600~1250kg/m	0.1kg/m	±3%
Dielectric constant	1~6	0.01	±3%
Water activity			±0.02aw(0~0.6)
	0~1aw	0.001	±0.03aw(0.6~0.9)
			±0.04aw(0.9~1)
Water content	0~1000ppm	1ppm	±10% of multiple measurements average
Note: Appropriate indicator sensors can be configured according to project requirements.			