



Description

The laboratory electronic thermometer **LTA/S-V** is intended for temperature monitoring and measuring time intervals while determining the viscosity of petroleum products by using glass capillary viscometers in accordance with ASTM D445.

LTA/S-V can be utilized as a stopwatch or general-purpose precise thermometer for reading contact temperature measurements of liquid, granular, and gaseous non-aggressive media.

Sensor Features

- Based on Pt100 thin film platinum element with custom calibration.
- Probe made of AISI 316 stainless steel.
- Connected directly or through an extension cable at ambient temperature up to +70 °C.

Features & Benefits

- Specifications of temperature meter and built-in stopwatch comply with the requirements of ASTM D445.
- The novel ergonomic design of the electronic unit allows it to be placed on a horizontal surface or securely fixed on vertical metal surfaces of laboratory furniture or sidewalls of baths using the built-in magnets.
- Utilizing carefully selected temperature sensors and modern electronic components provides excellent accuracy and long-term stability of temperature measurement.
- The thermometer can record the measurement results to the internal memory; calculate the minimum, average, and maximum value of the measured temperature.
- A custom designed LCD provides a convenient display of the operating modes and readings.
- The temperature sensor connection is placed in a safe location, protected from accidental damage.
- Two standard AAA batteries provide long operating time and do not require a special tool to replace.
- Built-in USB-interface for data transferring to a personal computer.

Technical Specifications

Measured temperature range	-50...+200 °C
Calibrated temperature accuracy	
• in the range of 0...+100 °C	±0.02 °C
• in the measured range	±0.05 °C
Temperature resolution	adjustable 0.1, 0.01 or 0.001 °C
Temperature response for 50% step change at water flow 0.4 mm/s	7 s
Minimum depth of sensor insertion	75 mm
Measured time interval range	0.1...9999.9 s
Time interval accuracy	±[0.1+1×10 ⁻⁴ ×T _{measured}] s
Dimensions:	
• electronic unit W×D×H	80×75×100 mm
• temperature sensor	Ø4×300 mm
Weight	0.25 kg
Power supply	Two AAA-size 1.5 V batteries