

## AST-701 Portable Touchscreen PH Meter



### Instrument Features:

1. Features a 7-inch high-resolution (1024\*600) color capacitive touch screen with an intuitive UI design, offering a navigation-style user experience. It boasts high sensitivity, displays a comprehensive set of parameters, and is both intuitive and easy to operate. The main unit's housing is constructed from PEEK material, providing excellent resistance to high temperatures, corrosion, and aging.
2. Equipped with a built-in 32-bit ARM microprocessor chip, the instrument utilizes digital filtering and sliding-window averaging technologies to intelligently enhance response speed and measurement data accuracy. The circuit board employs Surface Mount Technology (SMT), significantly improving the reliability of the manufacturing process.
3. Compliant with international GLP standards, the instrument features a suite of intelligent functions, including automatic calibration, automatic temperature compensation, data storage, USB output, real-time clock display, wireless printing capabilities, function configuration settings, and self-diagnostic information.
4. The instrument features a built-in bilingual operating system (Chinese/English) with a user-centric design. Screen brightness is adjustable, and temperature units can be freely toggled between Celsius (°C) and Fahrenheit (°F). The unit comes equipped with a temperature electrode to facilitate automatic temperature compensation.
5. The built-in large-capacity memory can store up to 2,000 sets of measurement data. Data can be easily transferred via a USB flash drive and opened using standard office software (such as Microsoft Excel), greatly facilitating data editing and analysis for the user.
6. The instrument comes standard with a Bluetooth module, supporting wireless Bluetooth printing for enhanced user convenience.

7. Expandability: Different pH electrodes can be quickly and easily interchanged (allowing users to select the most suitable electrode for specific sample types) to measure pH levels.
8. Automatically recognizes 15 types of standard pH buffer solutions, offering a choice of three distinct buffer series: the Euro-American series, the NIST series, and the Chinese series.
9. Intelligently monitors and assesses the status of the electrode, ensuring accurate and reliable operation for the user.
10. Powered by a rechargeable lithium-ion battery; supports charging via both standard AC power outlets and portable power banks.
11. Designed to meet the IP54 protection rating for dust and splash resistance.

## Main Unit Specifications

Model: AST-701

Display: 7-inch High-Resolution Color (1024×600) Capacitive Touchscreen

pH Display Range: -2.00 to 20.00 pH

pH Resolution: 0.1 / 0.01 pH

pH Relative Accuracy: ±0.02 pH

Input Current:  $\leq 2 \times 10^{-12}$  A

Input Impedance:  $\geq 1 \times 10^{12}$  Ω

mV Measurement Range: -1999 to 1999 mV

mV Resolution: 1 mV

mV Relative Accuracy: ±0.1% FS

Temperature Measurement Range: 0–100°C

Temperature Resolution: 0.1°C

Temperature Relative Accuracy: ±0.5°C

Temperature Compensation: Manual / Automatic (0–100°C)

Calibration: Automatic 3-point calibration

GLP Standard: Compliant

Buffer Standards: EU / USA / NIST

Data Storage: 2000 sets

Communication Interfaces: USB 2.0, Micro USB, Bluetooth Wireless

Operating Conditions: Temperature: 5–40°C; Humidity: 5–85%

Power Supply: 3.7V / 1800mA Rechargeable Lithium Battery

Product Dimensions & Weight: 160 × 190 × 70 mm / 880 g

