Ti-51 Automatic Titrator

GENERAL FEATURES

- Color High contrast LCD touchscreen, 7.0 inches.
- Potential titration and measurement of pH, pX, ion concentration.

Smart operation Auto-recognition High throughput

- Intelligent operation system provides features including user management, method management, sensor management, titrant management, data management and GMP management etc.
- User four-level authority management and password management.
- Method management function, built-in titration method (potentiometric titration method 200 sets) and measurement method (direct reading concentration method, known increment method, GRAN method), support custom method.
- Connection with auto sampler to realize the automatic measurement and batch detection of samples.

Titration

- Detection module expansion of dead stop titration, conductometric titration, photometric titration and temperature titration analysis.
- Replaceable burette with high-accuracy (5mL, 10 mL or 20 mL selectable).
- 1 extra burette driver can be installed (optional), support for dosing or titration.
- Burette line using acid and alkali resistance, perchloric acid resistance, organic reagent corrosion resistant material, can be non-aqueous titration.
- Support upper mixer and lower mixer.
- Support the following titration modes: DET (dynamic equivalence point titration), MET (monotone equivalence point titration), SET (Preset Endpoint Titration) ,constant pH titration, constant speed titration, Blank titration, and MAT (manual titration).
- Support acid-base titration, non-aqueous phase acid-base titration, REDOX titration, precipitation titration and complex titration and other titration methods.
- Displays the test method, titration curve and measurement results in real time.
- Formula editor can display calculation results directly.
- Supports recalculation of original data.

pH

- 1-3 points calibration with Standard Recognition.
- Selectable pH buffer groups, including NIST, DIN, GB.
- Automatic electrode diagnosis with pH slope and offset display.

Ion

- 1-3 points calibration.
- Selectable measurement unit, including μg/L, mg/L, g/L, mmol/L, pX, ppm and ppb.
- Measurement modes are supported, including Direct Reading mode, Standard Addition mode, and GRAN mode.
- Over 10 methods are built-in, including F^-, Cl^-, Br^-, I^-, NO_3^-, BF_4^-, NH_4^+, K^+, Na^+, Ca^{2+}, Cu^{2+}, Pb^{2+}, Ag^+ , etc. User-defined method is supported.

Data management, Audit trial

- Data Storage 1000 sets for each parameter (GLP-compliant).
- Support for GMP management, the GMP logs achieve the tracking and analysis of the the data.
- Support for RS-232 communication for print and the print format can be alternate.
- Support for USB communication for PC software.
- Support for U disk for method export and import.
- Support for U disk for data export with CSV or PDF format.
- Support for barcode scanner and balance(Specific model).
- It needs GMP software to implement GMP management functions.

Includes

- 10mL burette
- 231-01 pH indicator electrode
- 213-01 platinum electrode
- 216-01 silver electrode
- 232-01-D reference electrode
- 217-01-D reference electrode
- T-818-Q Temperature probe
- NIST pH standard powder(4.01, 7.00, 10.01)

Model		Ti-51
Repeatability		≤0.2%
Burette	Accuracy	5mL Burette: ±0.010mL 10mL Burette: ±0.020mL 20mL Burette: ±0.030mL
	Resolution	1/480000
Measuring Unit	Range	(-2000.00~2000.00)mV (-5.000~20.000)pH pX: (-2.000~20.000)pX Ion: (1.000e-9~9.999e+9) μg/L, mg/L, g/L, mol/L, mmol/L, ppm, ppb
	Resolution	pH: 0.001pH pX: 0.001pX Ion: Up to 4 significant digits mV: 0.01mV
	Accuracy	pH: ±0.002pH mV: ±0.03% or ±0.2mV
	Fluctuation	±0.3mV/3h
	Repeatability	≤0.1mV
Temp. Compensation	Range	(-10.0~135.0)℃
	Resolution	0.1 ℃
	Accuracy	±0.1℃
General	Power Supply	(80~250)VAC, (47~63)Hz
	Dimensions	240×370×270 mm
	Net Weight	About 4 kg