

POTENTIOMETRIC TITRATOR



Potentiometric Titrator Titra+ comes with quick interchangeable imported burette assemblies with intelligent recognition for its volume size. This potentiometric autotitrator is perfect for all types of industrial applications. The Titra+ has composite differential electrode amplifier unit for potentiometric and voltametric/Karl Fisher titration having connectivity to various electrodes. Three standard modes of titration namely incremental, equilibrium and cut-off mode is provided to perform all types of titrations. There is a real time clock for time display and report printout with run time indication. With a balance interface to directly transfer the weight. 50 methods can be stored and report of method parameter can be printed in Titra+.

FEATURES:

- 1) **Imported burette** assembly of various sizes (5/10/25 ml) with NIST traceability.
- 2) Perform all types of titrations including **Acid- Base, Non-aq, Redox, Complexometric, Precipitation as well as pH STAT Titrations.**
- 3) **Storage Facility** for 50 methods.
- 4) **GLP compliant printouts** of results, data table, graphs etc. with alphanumeric entries of sample name, titrant name, identification no. & date for report authentication.
- 5) **Auto calculation** of results in various selectable units.
- 6) Can be used as a simple **pH meter with display of pH, mV and temperature values.**
- 7) **PC Compatibility** - Software & built in balance interface.
- 8) **Two-tier password facility** (admin and user) to protect stored methods from any misuse or unwanted change.
- 9) Complies with **USP/BP/JP/EP/IP/ASTM standards.**
- 10) Quick & easy interchangeability from **titration mode to Karl Fischer titration mode.**

SPECIFICATIONS:

- 1) **Control:** Micro-controller based (Advanced version of microprocessor)
- 2) **mV Range:** ± 3200 mV
- 3) **Accuracy:** ± 0.1 mV (± 0.0016 pH)
- 4) **Amplifier Input Impedance:** $> 10^{12}$ ohms
- 5) **Burette Resolution:** 1/20000 for 10 ml volume
- 6) **Burette Volume:** 5 ml, 10 ml & 25 ml available
- 7) **Filling Time:** < 20 sec
- 8) **Keyboard:** Alphanumeric splash waterproof polyester soft keys
- 9) **Display:** 40 x 2 line back lighted liquid crystal display (LCD)
- 10) **Stirring System:** Microcontroller based variable speed, high torque vortex stirrer with digital indication. Magnetic Stirrer optional.
- 11) **Sensors:** (1) Electrodes for Potentiometric titration - {pH, Ion, Redox, Argentometric}. a) Any combination electrode. b) Differential Electrode System comprising sensing (Indicator) Electrode with BNC Connector and Reference Electrode with 4mm Banana Connector. (2) Electrode for KFNoltametric titration with BNC/TNC Connectors. (3) Temperature sensor (PRT/PT100)
- 12) **Calibration:** 3-point Calibration with user entered buffer values and standardisation with 7 pH buffer
- 13) **End Point Detection:** a) Potentiometric, b) Voltametric, c) Thermometric and Photometric.
- 14) **Cut-off-criteria:** a) Volume b) End point c) mV/pH
- 15) **Results:** a) Molarity b) % Assay (wt) c) % volume (ml) d) ppm e) mg/l i) mg/g g) g/l h) meq/l l) mV/kg j) TAN and TBN for oil samples.
- 16) **Input/Output Peripheral Interface:**
 - a) Parallel Port : 1 No. for printer
 - b) Serial Port : 2 Nos. for Balance & PC
- 17) **Power:** 230 V AC $\pm 10\%$, 50 Hz.