



World Class
Solution to
Titration
Applications

Hyllc

Potentiometric Titrator

Specifications

| Principle | Volume determination by equivalence point, end point | |
|----------------------|--|--|
| Control | Advanced ARM-11 based SOC | |
| End Point Detection | Potentiometric / Voltametric | |
| Results Units | Conc. %w/w, %w/v, ppm, g/L, mg/L, TAN /TBN (mg KOH/g). Universal user defined unit | |
| Calculations by | Selected EP, Largest EP, last EP, EP within specified ml / mV window | |
| Report Format | Single report with graph & signature | |
| Report Storage | 100 document reports can be stored. | |
| Cut-off criteria | (1) Volume (2) End Point (3) mV/pH | |
| Mode of Titrations | Blank, Normality, Sample | |
| Methods | FED, SVD, ASD | |
| Method Storage | 100 user methods can be stored with more than 20 parameters per method. | |
| Stirrer System | High speed vortex stirrer with digital display | |
| Stir time | Selectable for any desired time | |
| Sensors | Electrodes of various types | |
| Calibration | 5 point for pH, 5 point for ISE, 2 point for ORP | |
| Burette Resolution | 0.001 ml/step, with interchangeable burettes | |
| Filling time | < 20 sec. | |
| mV range | ±3200.00 mV | |
| Resolution | 0.01 mV (0.001 pH) | |
| Statistics | Mean value, SD, RSD & Linearity (online & offline calculation) | |
| Input impedance | 10 ^{'2} Ω | |
| Polarizing current | 2,5,10 micro amps | |
| Keys & Display | 7"TFT Touch screen display. | |
| Mouse Connectivity | Optional | |
| Peripheral Interface | USB (3), Rs232, Balance Interface, Parallel Printer, PC connectivity through Ethernet. | |
| Power | 230 V AC + 10%, 50 Hz | |
| Environmental | Operation: Indoor, Temperature: ambient to | |
| Requirement | 450C, Humidity: 5 to 90% non-condensing | |
| Dimension | 30 cm x 28cm x 17cm | |
| Measuring accuracy | ±0.01pH | |
| pH range | 0 to 14 pH | |
| Data Transfer | Data from the Instrument can be transferred using a USB or through LAN – Directly to PC. | |
| Measuring range | 10 ppm to 100% | |
| Data Storage | 100 Methods & 10 Reports can be stored directly in the system | |

Typical Applications

The titrator can be used in many fields for several applications. some of them are mentioned here

Pharmaceuticals And Bio-Chemistry

Enzyme Reactivity, Ketoconazole, Zinc Sulphate Titration

Environment and Water Pollution

P & M Alkalinity, Chloride Content, Ca & Mg Hardness.
COD Titration Alkalinity as CaCO3, Acid and Base capacity of water
Permanganate Index Lime content, Chloride content in Soil

Chemical Industries

Evaluation of Gold Number. Amine value of Silicon oil Sodium Chloride, Soda Lye, Sulphuric Acid Titrations Nitrogen content of Nitro cellulose Cationic surfactant Titrations Soaps and Anionic surfactant in washing powder Soap content in Soap Noodles

Dyes And Paints

Sulphate Analysis, Acidity of Dye

Petrochemical Industries

Total & Free Chlorine in Furnace Oil Saponification value of oil TAN/TBN as per ASTM. Mercaptan Sulfur Bromine Index And Bromine Number Iodine Value Titration Hydroxyl number (HN) as per ASTM E 1899-08 and DIN 53240-2

Food & Beverages

All titration are possible using different electrodes. Acid Base,
Argentometric, Redox, Precipitation, Complexometric. Typical application
includes Mono Sodium Glutamate Titrations Vitamin C Titration
Salt content in Food and Fortified products Ferric Pyrophosphate
Titration Acidity of Jam & Jelly Iodine content in salt.

Dairy Industries

Acidity of Milk, Chakka, Curd, Cheese & Shrikhand Free Fatty Acid

Distilleries

Acidity of Rectified Spirit, Alcohol Purity

Cosmetics

Chloride Content in Shampoo, pH

Iron & Steel Industries

Acidity of sand used in castings Typical Applications

Standards & Compliances

- CE Marking
- CFR Compliance
- GLP Compliance
- IEC, ASTM, APHA, Pharmacopeia
- Calibration Tracability
- Documentation DQ, IQ, OQ & PQ

(Accessories shown may not be part of standard equipment)

(Due to continuous R & D, the specification & Dimensions subject to modification.)

POTENTIOMETRIC TITRATOR WITH KF TITRATION CAPABILITY

Accurate, Reliable, Versatile

PRODUCT OVERVIEW

The Agile Potentiometric Titrator can also be used with Karl Fischer Titration functionality, fully-automated titration system designed to deliver accurate and reproducible results for moisture content and a wide range of chemical analyses. It supports all Titrations aqueous and non-aqueous titrations and various other Potentiometric Titrations, along with volumetric Karl Fischer (KF) methods. Works with all volume burette 5 ml 10 ml 15 ml 20 ml 25 ml or 50 ml

Ideal for pharmaceuticals, food, petrochemicals, and research labs, this titrator simplifies complex analysis with intuitive software, intelligent burette management, and precise endpoint detection.

Facility to attach circulating water bath 1 Deg C to 80 Deg C for titrations at elevated or Lower temperatures like Diazo Titration.



TECHNICAL SPECIFICATIONS

| Mode of Titrations | Blank, Normality, Sample |
|---------------------------|---|
| Stirrer System | : Magnetic stirrer with digital display |
| Stir Time | : Selectable for any desired time |
| Sensor | : Dual platinum electrode |
| Result Units | : %/w, %w/v, ppm, mg/ml |
| Burette | : 20 ml interchangeable |
| Burette Resolution | : 1/20000 steps or 0.001 ml/step |
| Filling Time | : < 20 sec |

KFT Attachment Set:

| Smart Interchangeable Burette | 1 No |
|-------------------------------|------|
| Dual Platinum Electrode | 1 No |
| Magnetic Stirrer with Stand | 1 No |
| KF Vessel (150 ml) | 1 No |
| KF Software (In Built) | 1 No |



SPECTRALAB INSTRUMENTS PVT. LTD. EL22/24, T.T.C., Electronic Zone, M.I.D.C, Mahape, Navi Mumbai -400 710, India





