

## Auto Titrator (21 CFR Part-11 compliant)

Model:  $\mu$ TitraCal100 | Make: ANALAB | HSN Code: 90278990



Basic Unit consist of Combined Glass Electrode with suitable connector, Rod Stirrer, Titration Vessel holders, Titration Vessels, 20ml Burette, Valve Jet assembly, Teflon Tubing with Connector, Stand, Standard Software, Communication Cable, Operational & Instruction Manual with SOP, Calibration Test Certificate (Without Traceability Document) and Warranty Card.

**(Note: Computer must procure optionally to operate the system)**

## Applications:

Auto Titrator is a highly competitive equipment matching almost all technical specifications. It is a complete titration equipment for potentiometric titration for both aqueous solutions with acid base and non-aqueous solutions such as Perchloric acid and Tetra Butyl Ammonium Hydroxide.

Potentiometric titration is most required in any chemical analysis. This type of analysis weighs in highly in pharmaceutical research and industry and is very economical and accurate. Other applications of this type of analysis are multitude but to draw a few examples, here is a list of industrial and research applications Antibiotics such as Norfloxacin, Ciprofloxacin, Ampicillin and Amoxicillin.

## Technical Specification:

pH Range	: 0 to 14
pH Resolution	: 0.001 pH
pH Calibration Point	: Three Point
Volume dosing	: 0.001 to 999.999 ml
Volume resolution	: 0.001ml to 1ml
Type of dosing	: Automatic by Auto Burette
Filling & Dosing of Titrate	: Automatic during titration process
% RSD	: Less than 1%
Dosing resolution	: 1/20,000 Resolution
Burette Calibration	: Yes – in built with system
Burette Correction	: Yes – inbuilt with system
Stirring	: Overhead stirring with help of Teflon spindle and ease of speed controlling knob on handy Stirrer
PC Connectivity	: Fully computer-controlled unit with all operations done using our proprietary software which makes this unit ideal for analysis especially within the Pharma industry.
Type of Titration	: <ul style="list-style-type: none"> <li>• Acid / Base titration</li> <li>• Aqueous / Non-Aqueous titration</li> <li>• Amperometry titration</li> <li>• Redox titration</li> <li>• Chelatometric titration</li> </ul>

- Precipitation titration
- Argentometric titration for Chloride, Bromide, Iodide and Cyanide
- Complexometric titration such as EDTA titration for metal ion estimation
- Lubricant and Transformer Oil analysis – TAN and TBN (ASTM procedure)
- Silver assay for hallmarking

**21 CFR Part 11 compliant**

- **Java platform to work across any configuration of computer.**
- **Data integrity with database capability to store method files, result files, audit trail and passwords.**
- **Strict admin controls to audit and monitor usage and access.**
- **No direct access to data from outside the Titrator application, thereby creating a closed system.**
- **Unlimited admin & user's creation. Auto email trigger when a new user is reacted.**
- **Audit traceability to ensure that the device and results are appropriately handled.**
- **Auto password expiry after a fixed period to ensure password integrity.**
- **Unlimited record keeping within the database.**
- **Auto lock out when password is entered incorrectly 3 times.**
- **Easy to use and set up method files with upload option for SOP.**

PC Interface : Serial (RS-232 C) Port  
Power Supply : 230VAC  $\pm$  10% 50 Hz

## Optional

### 1. IQ / OQ / PQ / DQ Documents

**Note:** a) Please provide Customer's Name & Address prior to dispatch.

- b) To perform onsite documentation, visit charge will be extra depending upon place of Installation.
- c) Traceability documents along with installation report.
- d) Standards / Chemicals / Buffers required to perform documents are in customer's scope.
- e) We don't send documents by email.

### 2. Silver Electrode with inbuilt reference with suitable Connector

### 3. Platinum Electrode with inbuilt reference with suitable Connector

### 4. Combination Glass pH Electrode with suitable Connector for Non-Aqueous Titration

### 5. Combination Glass pH Electrode with suitable Connector for Aqueous Titration

### 6. Burette, Valve Jet Assembly, Teflon Tube with Connector and Stand

### 7. Traceability Documents

#### Available other Models of Auto Titrator

- Auto Titrator Model:  $\mu$ TitraCal50 with PC/Laptop Connectivity
- Auto Titrator Model:  $\mu$ TitraCal100 with 21 CFR Part-11 & PC/Laptop Connectivity

#### Product Range

- pH/mV/°C/ORP Analyzer • Conductivity/TDS/Resistivity/Salinity/°C Analyzer
- Multiparameter Analyzer (pH/ORP/Conductivity/TDS/Resistivity/Salinity/°C)
- Karl Fischer Titrator • Auto Titrator • Automatic Melting Point Apparatus
- Flame Photometer • Friability Test Apparatus • Tablet Dis-integration Test Apparatus
- Tap Density Test Apparatus • Tablet Hardness Tester • Leak Test Apparatus
- Tablet Dissolution Test Apparatus • Electromagnetic Sieve Shaker • Ultrasonic Bath (Sonicator) • Analytical Electronics Balance • Halogen Based Moisture Analyzer
- Visible & UV-Vis. Spectrophotometer • Nitrogen Gas Generator • Zero Air Gas Generator • Combination Nitrogen / Zero Air Gas Generator • Air Drying Unit for TOC Analyzer • Dew Point Apparatus • Gas Handling & Purification System • Laboratory Furniture & Fume Hood • Exhaust Hood for AAS/ICP.

## ANALAB SCIENTIFIC INSTRUMENTS PVT. LTD.

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