



Universal Auto Titrator HP77

APPLICATION

HP 77 is a highly competitive equipment matching all international specifications. It is a complete titration equipment for potentiometric titration for both aqueous solutions with acid base and nonaqueous solutions such as Perchloric acid and Tetrabutyl Ammonium Hydroxide. Fully computer controlled unit with all operations done using our proprietary software with **21CFR Part 11 compliance**, makes this unit ideal for analysis especially



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within the Pharma industry.

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 examples, here is a list of industrial and research applications of the *Auto Titrator HP77*.

Antibiotics such as Norfolxacin, Ciprofoxycin, Ampycillin and Amoxcyllin

Redox titration

Argentometriditration for Chloride, Bromide, Iodide and Cyanide

Moisture estimation by Karl Fisher titration (PPM to %)

Complexometric titration such as EDTA titration for metal ion estimation

Lubricant and Transformer Oil analysis TAN and TBN (ASTM procedure) and moisture

Silver assay for hallmarking

Gold assay for hallmarking (coming soon)

Features

The software is 21 CFR part 11 compliant as per Pharma requirement

Hardware and Software validation with computer printouts

Report printout with average of up to 15 trials with RSD

Graphic potentiogram printout

First derivative of Potentiograms for easy observation

Future addition of statistical interpretation

Burette calibration and correction of dosed volume (a unique feature)



21 CFR Part 11 Features

We offer 21CFR Part 11 compliant software for the HP 77, which allows for greater control and monitoring of the equipment and its users.

Three levels of operation control with individual Admin, Supervisor and User passwords. 1 Admin account with 10 Supervisory accounts and 100 User accounts with unique usernames and passwords

Three different levels of operational control with Admin having full rights, Supervisors creating methods for analyses and with Users loading the method parameters and running the analyses

Inerasable audit trail to monitor login and log off access of all equipment users, tracking of parameters used for analyses as well as monitoring the reports generated

High levels of data integrity to ensure no scope for manipulating the results

Separate report creation and generation for Standardization and Moisture estimation, again with no scope for altering the results after analyses

RSD calculations for up to 5 trials to determine the validity of the obtained results

Date and time stamp as well as Instrument ID to track results obtained by equipment

Reports displayed with sample name, batch number, analytical report number, method file and user name along with the other analysis parameters

Specifications

Volume dosing: 0.001 to 999.999ml

Volumeresolution: 0.001ml to 1 μ l

Auto Fill and Dose during titration process

Moisture measurements from low PPM to 100%

RSD of 1% or less



OTHER PRODUCTS

Gas Chromatographs for various applications including **Portable models**

Head Space Auto Sampler for volatile organic compounds / residual solvents

Chromatography Integrator and Data Station for GC & HPLC Dual Channel

Auto Titrator for Potentiometric, Amperometric, Redox, Argentometric, Complexometric and Karl Fisher Titrations with 21 CFR Part 11 compliance

Microcontroller based **Karl Fisher Titrator** for Moisture Estimation

HPLC Column Ovens for heating and cooling purposes

Temperature Programmed Desorption unit (TPD/ TPR) for catalyst characterisation

High Purity Gas Generators for Hydrogen, Nitrogen and Zero Air

Ultrasonic Baths from 3.5 litres to 500 litres of any shape and size

Ozone Generator for sanitising and cleaning purposes as well as industrial purposes

Oxygen Monitor for measuring ambient Oxygen levels (wall mountable and portable models with built in alarm system for health and safety concerns)

Digital pH Meters with 2 Points and Microcontroller based up to 5 Points Calibration

Digital Conductivity and TDS Meter for Pure Water testing



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