

Pyro Provides Different modes of Titration




The screenshot displays the Pyro software interface. On the left, there is a 'Login Window' with fields for 'USER ID' and 'PASSWORD', and a 'Login' button. Below the login window is the 'LATTICE DATAHIVE' logo. On the right, there is an 'Audit Log' window showing a table of system activities. The table has columns for 'Serial No.', 'Date', 'UserName', 'Event', and 'Time'. The audit log shows various events such as 'User Logged in', 'User Logged Out', 'Titration of Batch No.', and 'Default Kauffischer - User Method Created'.

Serial No.	Date	UserName	Event	Time
21	13-02-2024	pyro	Administrator	User Logged in
20	13-02-2024	pyro	Administrator	User Logged Out
19	13-02-2024	pyro	Administrator	User Logged In
18	13-02-2024	pyro	Administrator	User Logged Out
17	13-02-2024	pyro	Administrator	ESD Record Generated
16	13-02-2024	pyro	Administrator	Titration of Batch No. - Sample Name: WATER Completed using Default Kauffischer method
15	13-02-2024	pyro	Administrator	Titration of Batch No. - Sample Name: WATER Started
14	13-02-2024	pyro	Administrator	Titration of Batch No. - Sample Name: WATER Completed using Default Kauffischer method
13	13-02-2024	pyro	Administrator	Titration of Batch No. - Sample Name: WATER Started
12	13-02-2024	pyro	Administrator	User add Approval Remarks for Report No. 9
11	13-02-2024	pyro	Administrator	User add Review Remarks for Report No. 9
10	13-02-2024	pyro	Administrator	Titration of Batch No. - Sample Name: WATER Completed using Default Kauffischer method
9	13-02-2024	pyro	Administrator	User System Shutdown
8	13-02-2024	pyro	Administrator	User Screen Locked
7	13-02-2024	pyro	Administrator	Titration of Batch No. - Sample Name: WATER Started
6	13-02-2024	pyro	Administrator	Titration of Batch No. - Sample Name: WATER Started
5	13-02-2024	pyro	Administrator	Titration of Batch No. - Sample Name: WATER Started
4	13-02-2024	pyro	Administrator	User Method: Default Kauffischer Recalled
3	13-02-2024	pyro	Administrator	Default Kauffischer - User Method Created
2	13-02-2024	pyro	Administrator	Default Pointometrics - User Method Created
1	13-02-2024	pyro	Administrator	User Logged in

21 CFR Part 11 Compliance Software

Complete Audit Trail of Activities according to US-FDA 21 CFR Part 11 compliance software

Search with filtering options to point out events in detail

Audit trial reports print out can be taken

Multi-level password with combination of alpha-numeric and symbols

Configurable Password expiry and Password lock facility

Configurable Privileges according to user hierarchy

Reports are generated in PDF format which can then be digitally signed

Watermark on every report

Print out over network through LAN removes the need to add a dedicated printer

View / Generate RSD, Average, Linearity reports while Titration is in progress

Complete instrument control from Desktop computer

DQ, IQ, OQ, PQ documents availability

Unlimited Reports storage and Method Storage

Report viewing and creation while Titration is in progress

Document report with attached Graph showing endpoint

Customized client logo attachment to reports.

Set Date and Time for Auto-Backup and Auto-Archiving of reports to local or remote locations

Software Auto Lock on idle or unattended screen

Access to Titrator over Intra LAN Connection

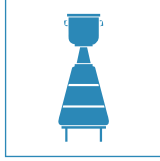
<ul style="list-style-type: none"> • Touch screen with intuitive GUI for easy understanding of workflow • Password protection against invalid user access • Burette Recognition Facility • Large storage capacity for report storage • Reports are stored into system and can be viewed even after reboot • All reports generated can be viewed, printed or transferred to external storage drive • Online graph to view the titration trend 	<ul style="list-style-type: none"> • RSD, LINEARITY, AVERAGE can be generated and stored and viewed anytime later • Customised Formula can be created & used in titration to generate results • Titration Numbers Auto increment & Auxiliary parameter for Company information & Sample Data can be entered for Titrations run can be viewed in titration reports • Balance Interface can be available during titration through USB Port
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Principle	Volume determination by equivalent end point	Display	7 inch Capacitive Touch Screen
mV range	± 2500mV	Calibration	5 point calibration (pH, ISE) 2 point calibration (ORP)
Accuracy	± 0.01mV	Stirrer	Separate Stirrer with Touch Screen based Speed Control.
Input Impedance	10 ¹² ohms	Technology	ARM Cortex SOC with MIPS
Burette Resolution	1 micro litre (1 uL)	Cut-Off Criteria	Volume, End Point, mV/pH
Sensors	1. Potentiometric (pH, Redox, Aqueous, Non-Aqueous, Complexometric, Argentometric, ISE, Electrodes) 2. Temperature Sensor. 3. Karl Fischer Electrode	Communication Interface	Ethernet (Datahive S/W for Data Collection with 21 CFR Part 11 Compliance), Ethernet/WI/FI (PC connectivity, printer over intra network), USB for report transfer to external drive, printer interface.
Filling Time	Max. 30 secs.	Printer	Any LAN or USB printer (Laser Printer, Deskjet Printer of all brands)
Result Unit	Conc., % w/w, % w/v, g/L, mg/L, TAN/TBN, Purity, PPM, %	Operating Condition	Indoor, Ambient Temperature 45°C, Humidity 5 to 90% non-conditioning
Method	Step Volume Dosing (SVD), Anticipatory Step Dosing (ASD), Fixed End Point Dosing (FED) & Karl Fischer (KF)	End Point Detection	Largest, Last, Selected Ep
Titration mode	Blank, Sample, Normality & Titer	Reports & Method Storage	1000 Reports & Method with Standalone unit.
Report	Analysis Report (Result, Parameter, Document, mL/mV, Graph) Statistic Report (Average, RSD, Linearity) Calibration Report (pH, ORP, ISE)	End Point Detection	Potentiometric, Voltametric

Applications



**Food &
Beverage**



**Wine &
Distillery**



Steel Industry



Cosmetics



**Agriculture &
Mining Industry**



**Environment &
Water Testing**



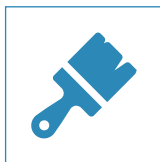
**Petrochemical
Industries**



**Pharmaceuticals &
Biochemistry**



**Chemical
Industry**



Paint Industry

Accessories



Sensors and Syringe



IRIS Provides Different modes of Titration



K. F. is a titration process used to calculate the moisture % of sample using a known standard. IRIS Software Provides a Sophisticated Report generation process with ease of reading.

Detailed Reports with every aspect of titration is divided into Result, Parameter, Document, Statistic reports Average, RSD.

Features

- › Touch screen with intuitive GUI for easy understanding of workflow.
- › Password protection against invalid user access.
- › Burette Recognition Facility.
- › Large storage capacity for report storage.
- › Reports are stored into system and can be viewed even after reboot.
- › RSD, AVERAGE can be generated and stored and viewed anytime later.
- › Customised Formula can be created and used in titration to generate results.
- › Titration Number Auto increment and Auxillary Parameter for Company information and Sample Data can be entered for titrations run can be viewed in titration reports.
- › All reports generated can be viewed, printed or transferred to external storage drive.
- › Balance data can be directly transferred to the instrument during titration through USB port.

IRIS Auto-Titrator is 21 CFR Part 11 Compliant

IRIS Data System (IDS)

The CFR S/W adds a whole new paradigm to the auto titrator they are as follows:

- 1: Audit Trail for every activity performed by user can be viewed anytime.
- 2: Search with filtering options to point out events in detail.
- 3: Filtered search audit trial reports print out can be taken.
- 4: Multi level roles with password protection.
- 5: Configurable Password expiry and Password lock facility.
- 6: Configurable Privileges.
- 7: Print out over network through LAN removes the need to add a dedicated printer.
- 8: Auto archive and Data Backup.
- 9: Remote Instrument Access From Desktop.
- 10: DQ, IQ, OQ, PQ documents availability.

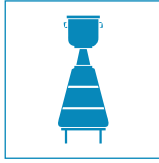
Specifications

Principle	Volume determination by equivalent end point
mV range	+ 2500mV
Accuracy	+/- 0.01mV
Input Impedance	10 ¹² ohms
Burette Resolution	1 micro litre
Filling Time	Max 30 secs
Sensors	Karl Fischer Electrodes (Voltametric)
Power	Single Phase - 230 V AC 50 Hz
Stirrer	Separate Stirrer with Touchscreen based Speed Control
Display	7 inch Capacitive Touchscreen
Report & Method Storage	1000 Reports & Methods
Technology	ARM Cortex SOC with MIPS
Cut-off Criteria	Volume, Endpoint
Communication Interface	Modbus (Integra Software for multiple Instrument, Data Collection with 21 CFR Part 11 compliance), Ethernet/WIFI (PC Connectivity, Printer over intra-network), USB for Report Transfer to External Drives, Printer Interface
End Point detection	Voltametric
Reports	Analysis Reports (Result, Parameters), Statistic Reports (RSD, AVERAGE)
Operating Conditions	Indoor, Ambient Temperature 45°C, Humidity 5 to 90% non-condensing
Result Units	PPM, %
Titration mode	Blank, Sample, Titer (Karl Fischer)

Applications



**Food &
Beverage**



**Wine &
Distillery**



Steel Industry



Cosmetics



**Agriculture &
Mining Industry**



**Environment &
Water Testing**



**Petrochemical
Industries**



**Pharmaceuticals &
Biochemistry**



**Chemical
Industry**



Paint Industry

Accessories



Sensors and Syringe

