

One Click[®] Water Determination Flexible, Simple & Secure



Solvent Control

The titration cell is always in good condition, as Solvent Control monitors three different parameters and replaces the solvent when necessary in One Click or even automatically. The Solvent Manager also empties, fills or replaces the solvent whenever required and keeps the user fully protected.



Automation with Stromboli

Up to 14 samples can be titrated in unattended operation with the Stromboli oven sample changer. Repeatability and efficiency is significantly improved and operation becomes simple, as Stromboli is fully controlled by the titrator. Flexible methods allow multiple blank and sample series with statistics.



User Management

All users have their own Homescreen with Shortcuts for One Click start of any task. Routine users can exclusively run their Shortcuts to perform routine tasks, but can not accidentally change anything e.g. in the setup. In connection with LabX pro titration PC software the Remote mode offers full support of FDA 21 CFR part 11 regulations.



V30 Compact Volumetric KF Titrator

The all-round Karl Fischer titrator is the flexible and powerful instrument for fast and precise water determination of samples from any industry with a water content between 100 ppm and 100%.

- Color Touchscreen with One Click user interface
- User specific Homescreen with Shortcuts for direct access to all routine tasks
- User interface in English, German, French, Spanish, Italian, Chinese, Russian, Polish, Korean and Portuguese
- Task list for queuing different tasks and direct access
- Intelligent burettes with RFID chip saving relevant data
- Connectivity to LabX[®] titration PC software via USB or direct Ethernet (TCP/IP)
- Common USB printers or the USB-P25 compact printer for secure and GLP-compliant recording
- Homogenizer TTL I/O control

Line	Method function
1	Title
2	Sample
3	Titration stand (KF stand)
4	Mix time
5	Titration (KF Vol) [1]

Buttons: Cancel, Print, Delete method, Insert, Start

Flexible powerful methods

Samples that do not release water easily or that cause side reactions can be analyzed using a Homogenizer or external extraction. Predefined methods that trigger the homogenizer or offer direct blank determination of the extracting solvent make these applications simple. The method database contains METTLER TOLEDO methods for any kind of Karl Fischer applications and the method editor makes changes to the methods quite intuitive.

V30 Functionality Overview

Application	Solid, liquid and gaseous samples	•
	Resources and method database	•
	KF titrants	100
	KF standards	50
One Click® Titration	User specific Homescreen with Shortcuts	•
	Shortcuts per user	12
	Solvent Control	•
Hot Plug & Play	Solvent Manager	•
	Burette recognition with titrant, concentration and monitoring data	•
	External Dosing Unit for addition of auxiliary reagents	•
	USB printer DIN-A4/US letter / USB-P25 compact paper roll printer	•
	USB memory stick / USB barcode reader / USB hub	•
Security	LevelSens	•
	LogStraight Fingerprint Reader	•
Automation	Stromboli oven sample changer	•
User Management	Expert – Routine	•
Methods and series	Preprogrammed METTLER TOLEDO methods	11
	KF standard methods	4
	Max. number of user methods	120
	External extraction/dissolution dedicated method type	•
	Number of samples per series	120
	Autostart: automatic start after sample addition	•
	Drift stop for endpoint recognition (absolute and relative, tmax, delay)	•
	Max. number of calculations/results per method	40
	User defined calculations	•
	Statistics of up to 120 samples including result limits check, outlier test	•
	Extra statistical functions as max. srel and multiple determinations	•
	Recalculation of results	•
	Data in Online Screen: time, water count, potential, stirrer speed, volume, drift	•
	Data in measured value table: time, water count, potential, volume, drift	•
Curves in Online Screen and printout: E-V, E-t, V-t, drift-t, water count-t	•	
Task list	Number of tasks queued	10
Online Help	Context sensitive parameter explanation	•
Data Export	RS-232	•
Languages	User interface and printouts in English, German, French, Spanish, Italian, Chinese, Russian, Polish, Korean, Portuguese	•
PC software	LabX® titration light and pro	•
	LabX® pro full FDA 21 CFR part 11 support	•
Homogenizer	TTL	•
Communication	Ethernet (TCP/IP)	1
	COM (serial balance connection)	1
	USB host (printer, memory stick, barcode reader, hub)	2
	USB client (PC)	1
	Integrated Magnetic Stirrer	1
	TTL I/O	1
	Pump / Stirrer	1

V30 Technical Specifications

Polarized sensor input	Measurement range	-2000...+2000 mV
	Resolution / Limits of error	0.1 mV / 2 mV
	Polarization current range	0...24 µA
	Polarization current resolution / Limits of error	0.1 µA / 1 µA
Burette drive	Drive resolution	20'000 steps
	Burette resolution (for 5 mL burette)	0.25 µL
	Limits of error	0.3% of the respective volume
	Resolver	32 pulses / mm stroke
	Resolver resolution	0.0625% of burette volume
Environment	Filling time and discharge time	20 s at 100% filling rate
	Ambient temperature	+5...+40 °C
Titration dimensions	Atmospheric humidity	max. 80% at 31 °C
	Width x depth x height / Weight	210 x 333 x 320 mm / 4.2 kg
Control and display	Glass beaker	150 mL
	Touchscreen	QVGA 5.7" color TFT, 320 x 240 pixel
Application (depends on the environment and handling)	Drift measurement	Online, < 5 µg/min
	Measurement range	100 ppm...100%
	Repeatability	0.3% at >10 mg H ₂ O



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