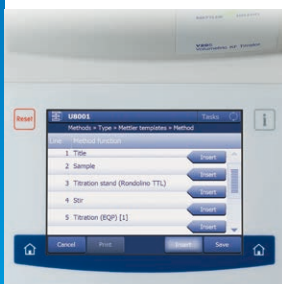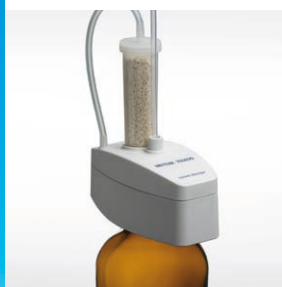# One Click® Water Determination
Simple and Secure

One Click® User Interface
The large color touchscreen features the simple-to-understand and fast-to-operate One Click user interface. All users have their own homescreen with dedicated shortcut buttons to directly start specific routine tasks. For security operation, users can be assigned to different user groups and access the instrument with their own username and password.
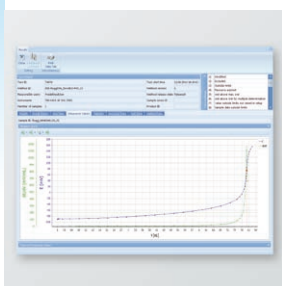
Solvent Manager
Users are protected against contact with chemicals using the Solvent Manager liquid handling device. It is fully controlled by the titrator and offers solvent exchange with only One Click without additional user interaction.

Intelligent Burettes
The titrant is automatically recognized, when the burette is installed on the titrator. Important data such as concentration or lifetime is saved on the RFID chip and directly transferred to the titrator, where it is stored and can be monitored. Using the wrong or an expired titrant is therefore impossible.

PC software LabX® Titration
Full control over the titrator, secure database archiving, networking, efficient result management with control charts and individual search filters or rapid and clear method development are only some aspects of the powerful LabX titration PC software.

V20S Compact Volumetric KF Titrator

The routine Karl Fischer titrator combines fast and precise water content determination with easy operation. Samples from any industry with water content between 100 ppm and 100% are analyzed in single measurements or sample series with statistics.

• Color touchscreen with One Click user interface
• User interface in English, German, French, Spanish, Italian, Chinese, Russian, Polish, Korean and Portuguese
• Intelligent burettes with RFID chip saving all relevant titrant 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 paper recording

METTLER® TOLEDO

Functionality Overview

		V20S
Application	Solid, liquid and gaseous samples	•
	Resources and method database	•
	KF titrants	100
	KF standards	50
One Click® Titration	User specific Home Screen with Shortcuts	•
	Shortcuts per user	12
	Solvent Control	–
Hot Plug and Play	Solvent Manager	•
	Burette recognition with titrant, concentration and monitorig data	•
	External Dosing Unit for addition of auxiliary reagents	–
	USB printer DIN-A4/US letter / USB-P25 compact printer	•
	USB memory stick / USB barcode reader	•
Security	LevelSens	–
	LogStraight Fingerprint Reader	–
Automation	InMotion KF Oven Autosamplers	–
User Management	4 fixed user groups: Administrator, Expert, Technician and Operator	•
	User password protection	•
Methods and series	Preprogrammed METTLER TOLEDO methods	–
	KF standard methods	4
	Max. number of user methods	5
	External extraction/dissolution dedicated method type	–
	Number of method function	12
	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	3
	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	–
Online Help	Context sensitive parameter explanation	•
Data Export	USB, Ethernet, PDF	•
Languages	User interface and printouts in English, German, French, Spanish, Italian, Chinese, Russian, Polish, Korean, Portuguese	•
PC software	LabX® Titration Express and Server	•
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
	Pump / Stirrer	1

– exclusive V30S functionality

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	0.2% of the respective volume
	Resolver	32 pulses / mm stroke
	Resolver resolution	0.0625% of burette volume
	Filling time and discharge time	20 s at 100% filling rate
Environment	Ambient temperature	+5…+40 °C
	Atmospheric humidity	max. 80% at 31 °C
Titrator dimensions	Width x depth x height / Weight	210 x 333 x 320 mm / 4.2 kg
	Glass beaker	150 mL
Control and display	Touchscreen	VGA 5.7" color TFT, 640 x 480 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_2O

METTLER TOLEDO Group
Analytical Instruments
Local contact: www.mt.com/contact

www.mt.com/titration

For more information

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