Compact Titrator

G20

# One Click Titration™

## Simple & Dependable

METTLER TOLEDO

The Intelligent Helper
for Simple Titrations

- **One Click Titration™**
- **Intuitive method adaptation**
- **Accurate results simply and in no time at all**

It's all in the push of a button

The large, color touchscreen with the One Click® user interface is easy to understand, and you'll be able to familiarize yourself with the screen in no time at all. Each user has his/her own homescreen with customized language selection and shortcut keys, which enable routine procedures to be executed with just one push of a button.
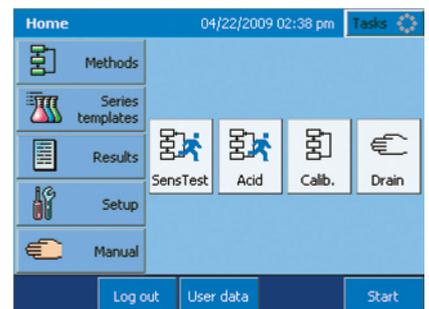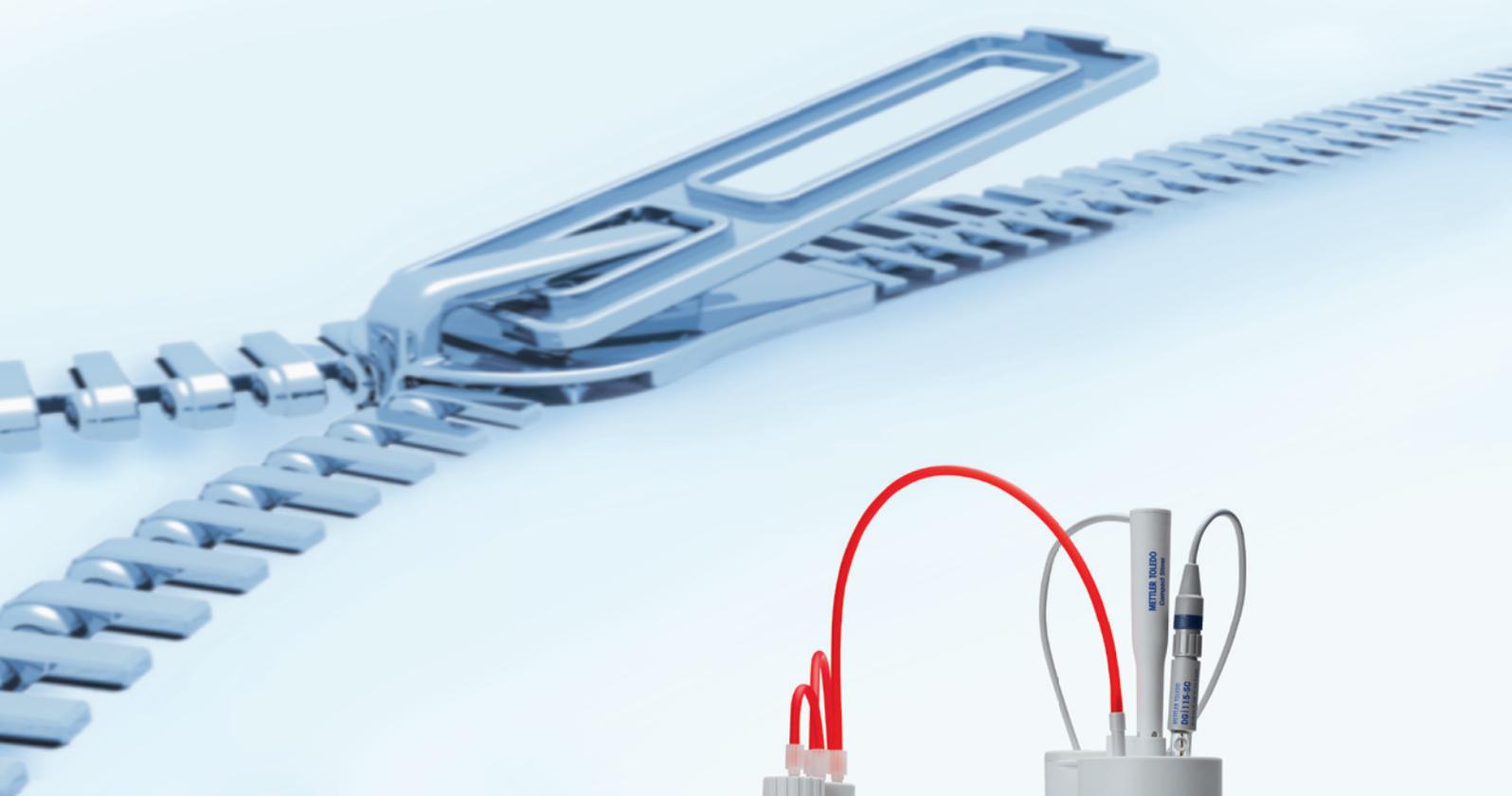
Adapt predefined methods to your needs

Over 20 standard tried-and-tested methods from diverse application areas are available as pre-programmed METTLER TOLEDO methods and can be used directly. If necessary, they can be easily edited with the well-structured method editor.

Modular method editor – intuitive at all levels

The direct path to accurate results

The G20 offers a wide selection of standard calculations that can be selected from a list of proposals, and it automatically adapts calculations to modified method parameters. Calculation-related errors are no longer a cause for concern. The result unit can be adapted in the user-defined calculations to meet individual requirements.

Overview of calculations

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The Perfect Solution
for Dependable Results

- **Fast installation**
- **Data storage with optional LabX® light PC software**
- **Work safely with chemicals**
- **Sensor test ensures high levels of reliability**
- **Simple automation**

Data storage in PC software

LabX® light titration PC software offers full titrator control, safe database archiving, efficient management of results with graphic monitoring and individual search filters. The convenient Windows-based user interface and the integrated online help system enable the user to operate G20 via LabX® light titration in a reliable and safe manner.
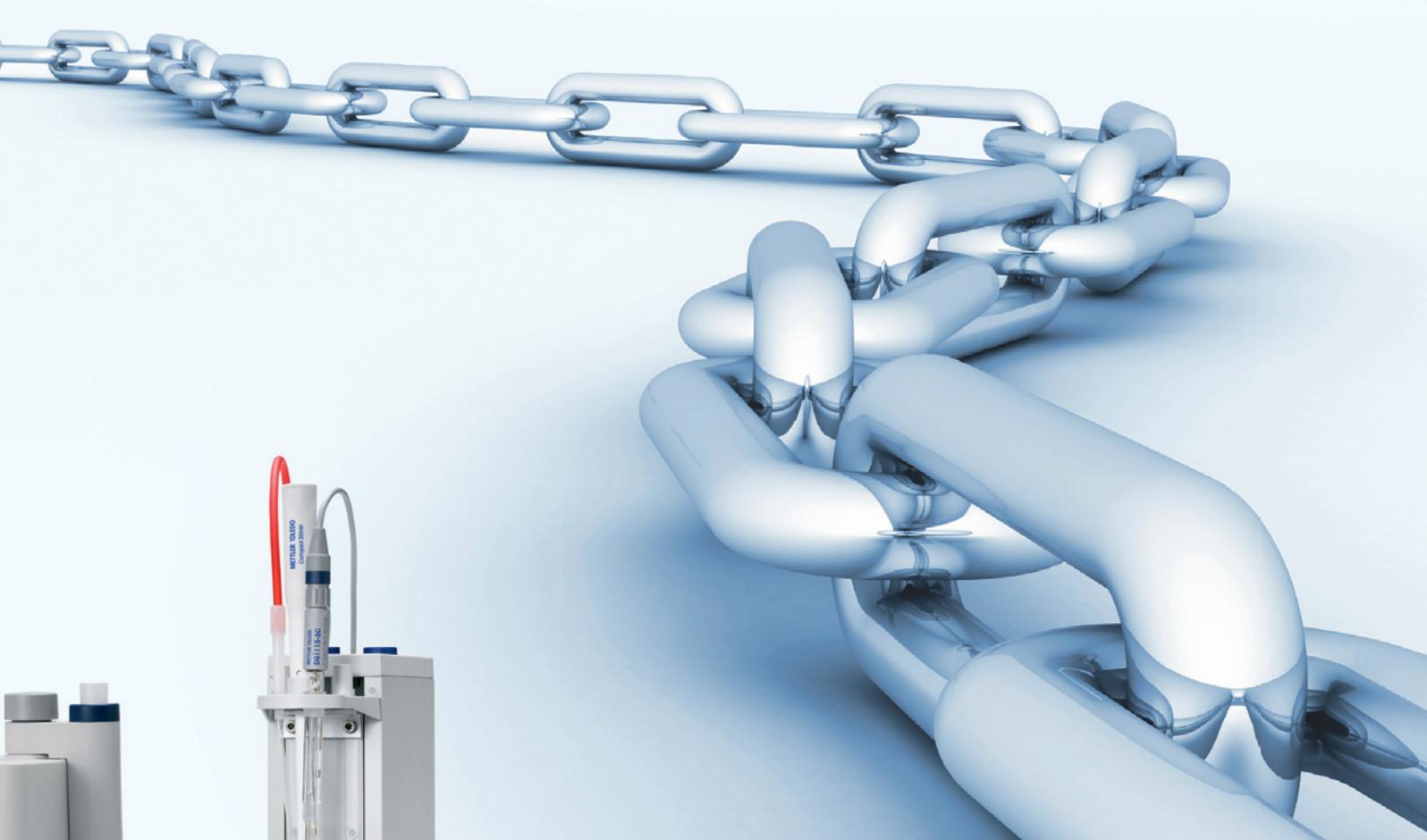
Compact and simple automation

The automated Rondolino titration stand is simple to install and uses minimal bench space. Series of up to 9 samples are processed quickly and safely. Dip-rinsing after each analysis ensures minimal carry-over and after the series, the sensor is moved to a fixed conditioning beaker.

Fast installation

Both the titrant and the sensor are automatically detected upon connection to the titrator and all applicable data are saved on the burette or sensor chip. These data are directly transferred to the titrator, where they can be saved and monitored. Errors occurring during the installation of resources are now a thing of the past. Plug & Play – safe titration couldn't get any simpler.

Working safely with chemicals

The Solvent Manager protects the user against contact with liquid chemicals. Fully controlled by the titrator, waste can be pumped out without user intervention.

Sensor test promises dependable results

The sensor test, designed in line with GLP principles, ensures that the sensor complies with applicable specifications prior to each titration. This increases the reliability and accuracy of analyses.

The Perfect Accessories
for Your Application

G20 – the starter model

G20: with manual titration stand

G20 Rondolino: with automatic Rondolino titration stand and electrode holder

Both come equipped with an integrated burette drive, DGi115-SC Plug & Play sensor, compact rod stirrer and 20 mL burette.

Accessories include printers, Solvent Manager, dosing units and much more.

Overview of accessories

Software

PC Software
LabX® light titration

Plug & Play and conventional sensors

Plug & Play	Conventional	
pH	pH	Phototrode™
Platinum	Platinum	Temperature
Silver	Silver	Half cells/
	Tenside	reference electrodes

Printer / balance

 USB P25 printer

 USB printer

 Analytical balances

Burettes and dosing

Burettes
20 ml
10 ml
5 ml
1 ml

 Dosing unit

Automation

Rondolino
Automated titration stand

 Manual titration stand

Solvent handling

 SP250
Peristaltic pump

 Membran pump

 Solvent Manager

Overview of G20 functionality

One Click Titration™	Shortcuts per user	4
	Detection of Plug & Play sensors	•
	Burette detection with titrant and titer	•
Hot Plug & Play	Dosing unit	•*
	Solvent Manager	•*
	USB printer	•*
	USB Memory stick	•
Automation	Rondolino	•
Burette drives	Integrated for dosing and titration	•
	External for dosing only	•*
	Learn titration	•
	Number of method functions per method	11
	Number of samples per series	120
Methods and series	Preprogrammed METTLER TOLEDO methods	>20
	Max. Number of user methods	5
	Max. Number of calculations/results …per method	2
	Predefined calculations	•
Languages	User interfaces and printouts in English, German, French, Spanish, Italian, Chinese, Russian, Polish, Korean	•
Sensor inputs	Potentiometric / polarized	1
	Reference	1
	PT1000 temperature	1
	Ethernet	1
	COM	1
Communication	USB Host	2
	USB Client	1
	CAN Bus	1
	TTL I/O	1
	Pump / stirrer	1 (with Y cable pump and stirrer in parallel)
PC software	LabX® light titration	•*

* Optional

Technical Specifications

Potentio metric sensor input	Measuring range	± 2000 mV
	Resolution	0.1 mV
	Error limit	0.2 mV
Polarized sensor input	Measuring range Ipol / Upol	0 … 2000 mV / 0 … 200 µA
	Resolution Ipol / Upol	0.1 mV / 0.1 µA
	Error limit Ipol / Upol	2 mV / 0.2 µA
	Current source range Ipol / Upol	0–24 µA AC / 0–2000m V AC
	Current source resolution Ipol / Upol	0.1µA / 0.1mV
PT1000 temperature sensor	Measuring range	-20...130°C
	Resolution	0.1°C
	Error limit	0.2°C
Burette drive	Burette resolution	1/20'000 of the burette volume
	Burette resolution (20mL burette)	1µL
	Error limit	0.2% of the burette volume
	Resolver resolution	0.0625% of the burette volume
	Fill and eject time	20 s
Titrator dimensions	Width x depth x height	210 x 333 x 320 mm
	Weight	4.2 kg
	Screen	VGA 5.7" color TFT
	Resolution	320 x 240 pixels

Service and Support

Instrument qualification and method/process validation to comply with regulations doesn't apply only to strictly regulated areas.

ISO certified companies also require certification and documentation within the scope of their own quality and safety standards. Rest assured in the knowledge that your titrator has been installed in line with these standards in mind. Ask for the appropriate service product offered by your local METTLER TOLEDO organization.

- IPac: Initial qualification consisting of IQ and OQ
- Comprehensive calibration services

Titration Excellence T50, T70, T90

The flexible, modular titration system is tailored to your requirements with a wide selection of automation options. One Click® Titration for all titration applications – simple, efficient, reliable and modular.

Volumetric Compact Karl Fischer V20, V30

Determine water content in the 100 ppm to 100% range simply and safely with V20/V30 Compact Karl Fischer Titrators. Simple operation of the established One Click® user interface and the Solvent Manager, protecting the user from contact with chemicals, are just two of its many advantages.

Coulometric Compact Karl Fischer C20, C30

All you need for water determination from 1 ppm to 5% water. Select the generator cell with or without diaphragm depending on sample requirements, and determine the smallest quantities of water quickly and precisely.

www.mt.com/titration

For more information

Quality certificate. Development, production and testing according to ISO 9001.

Environmental management system according to ISO 14001.

"European conformity". The CE conformity mark provides you with the assurance that our products comply with the EU directives.