Lab Meters

The Seven Product Family

SevenEasy™
SevenMulti™
SevenGo™

pH, ORP/Redox
Conductivity
Dissolved Oxygen
Ion Concentration

Quick and Sure Measurements

– For Results at Your Fingertips

METTLER TOLEDO

SevenEasy™ pH
– the nature of measurement

- **Intuitive pH measurement for everyday work in the laboratory**
- **Improved quality of measurements through automatic functions**
- **Comprehensive service package including IQ/OQ/PQ**

SevenEasy™ S20
– You and your instrument
An instrument that meets all your requirements – without stretching your budget. It originated from the synthesis of precise electrochemical measuring technology with innovative design and takes into account your most current requests regarding quality control, data management and legal regulations. The user interface has been designed so that operating procedures are self-explanatory. Application possibilities range from independent battery-operated individual measurements through to detailed analysis, including global data acquisition and local network facilities.

ATC
The Automatic Temperature Compensation (ATC) feature allows the electrode signal to be corrected for the effect of temperature.

Automatic endpoint
This improves the reproducibility of your measurement data and safeguards the quality of your results.

Automatic buffer recognition
With this function you can use your pH buffers in any order for your routine calibration. This speeds up calibration procedures and eliminates unnecessary error messages. Choose a 1-, 2- or 3-point calibration.

Seven Service – Electrochemical instruments at your service
Regular equipment qualification increases the uptime and accuracy of your instrument over many years. It is just one of a number of services that METTLER TOLEDO offer, tailor-made to suit your needs for all Seven instrument lines. All meters are delivered with a signed manufacturer's certificate. Seven Service – better assurance of your results. More information on Services can be found at **www.mt.com /ServiceXXL**

„Easy" – Obviously so easy
The clear, high-contrast display with its large digits allows you to read measurement results and other relevant information easily. Neither a program menu nor operating instructions are needed.

Electrode condition
You see right away whether your electrode is in good condition. Does it have to be cleaned or replaced? A pictogram immediately puts you in the picture.

Flexible in more ways than one
The METTLER TOLEDO electrode stand can be used stand-alone or attached to the left or right-hand side of the meter. This makes it ideal for both right and left-handed people and for use with other meters

A comprehensive range of pH electrodes is given in the separate electrode brochure (Order No. 51724332).

SevenEasy™ S20	Measuring range	Resolution	Accuracy
pH	0.00 … 14.00	0.01	±0.01
mV	-1999 … 1999	1	±1
Temperature	-5.0 … 105.0 °C	0.1 °C	±0.5 °C
Sensor inputs	BNC, Cinch/RCA (NTC 30 kΩ)		
Interfaces	RS232 (connection to printer or PC)		
Power requirements	Power adapter (9 V, DC) or four AA batteries (not incl.)		
Size / Weight	180 x 180 x 65 mm / 610 g		
Package / Weight	370 x 320 x 165 mm / 3.1 kg		

Ordering info.	Standard Equipment	Order No.
S20 (instrument)	Includes instrument, electrode stand, operating instructions, declaration of conformity and test certificate	51302803
S20-K (kit)	As for S20, plus InLab®413, Guide to pH measurement and 2 buffer sachets each for pH 4.01, 7.00 and 9.21 (or 10.00)	51302804
S20-KS	As for S20-K, with InLab®410 instead of InLab®413	51302863

SevenEasy™ conductivity – the little wonder

- **User-friendly operation for demanding users**
- **Excellent reproducibility due to improved sensor technology**
- **Integrated interface for data exchange**

SevenEasy™ S30 – Unbeatable price/performance ratio
SevenEasy™ integrates all the basic functions of a professional conductivity meter and at the same time does not overstretch your budget. The range of electrodes is practically unlimited and the measurement accuracy even allows the analysis of purified water according to USP/EP requirements.
The S30 is truly a little wonder within the Seven line. If you want more operating convenience, the SevenMulti™ S70 or S47 are excellent alternatives.

Mobility
Both SevenEasy™ – pH and Conductivity – can be connected to the line voltage or operated from batteries. Make SevenEasy™ independent of line power by inserting four AA batteries!

Temperature compensation
You can use three types of temperature compensation: linear, non-linear (DIN 38404) and no compensation for purified water (USP/EP). The SevenEasy™ S30 is ready for all types of samples.

Self-diagnosis
The S30 also has a self-diagnostic test program, just like the SevenEasy™ S20. The user can check the hard and software using an interactive dialog with the instrument. This is your personal guarantee that everything is working properly.

The right electrode for every application

The S30-K is equipped with the robust multipurpose InLab®730 conductivity cell as standard. This cell covers a multitude of applications involving aqueous samples above 10 µS/cm. Samples that contains solvents should be measured with cells made of platinum and glass such as the InLab®710 or InLab®720. The high performance InLab®740 electrode can measure samples down to 0.001 µS/cm.

The detailed specifications for each electrode are given in the separate electrode brochure (Order No. 51724332).

Peripheral connections

The S20 and S30 instruments are equipped with an RS232 interface as standard. You can connect a printer or a computer to SevenEasy™: very convenient GLP support.

TDS/ SAL/ RES

4 measurement modes

The SevenEasy™ S30 offers you all the different measurement modes and units: conductivity, TDS, resistivity and salinity. This eliminates the need for any manual calculations.

Cal

Flexible calibration

You can calibrate the meter as desired with conductivity standards of 84 µS/cm, 1413 µS/cm or 12.88 mS/cm. If you know the exact cell constant, you can enter this manually and edit it anytime. This ensures maximum flexibility and measurement accuracy.

SevenEasy™ S30	Measuring range	Resolution	Accuracy
Conductivity	0.01 µS/cm … 500 mS/cm	0.01 ... 1	±0.5%
Temperature	-5.0 … 105.0 °C	0.1 °C	±0.2 °C
TDS	0.01 mg/L … 500 g/L	0.01 ... 1	±0.5%
Resistivity	0.00 ... 20.00 MΩ cm		
Salinity	0.00 ... 80.00 ppt (parts per thousand) Practical salinity scale UNESCO 1978 Natural sea water UNESCO 1966b		
Sensor inputs	Mini-DIN		
Interfaces	RS232 (connection to printer or PC)		
Power requirements	Power adapter (9 V, DC) or four AA batteries (not incl.)		
Size / Weight	180 x 180 x 65 mm / 610 g		
Package / Weight	370 x 320 x 165 mm / 3.1 kg		

Ordering info.	Standard Equipment	Order No.
S30 (instrument)	Includes instrument, electrode stand, operating instructions, declaration of conformity and test certificate	51302805
S30-K (kit)	As for S30, plus InLab®730, Guide to conductivity determination and 2 buffer sachets each: 1413 µS/cm and 12.88 mS/cm	51302806

SevenMulti™
– pH measurement expanded

- **Modular system for pH, conductivity, ion concentration and ISFET**
- **Increased efficiency due to numerous automation options**
- **State-of-the-art data management with 1000 GLP measuring points, 400 GLP calibration points and 40 methods**
- **Easy integration in LIMS solutions**

SevenMulti™ – Modular expansion at any time
An ingenious instrument concept based on precise electrochemical measuring techniques combined with the latest solutions for your laboratory requirements.
The instrument's modular design allows you to upgrade it at any time with a number of handy plug-in expansion units. You can now easily turn it into a dual channel instrument.

With SevenMulti™ you will find an overall sophisticated concept to meet the challenges of today and tomorrow.

Clear text menus
The back-lit display shows you all the important information at a glance, even in two-channel operation. The menus guide you clearly through all aspects of operation – from installation, calibration and measurement, to the control of peripherals.

Automatic recognition
SevenMulti™ automatically recognizes a new module that has been installed. This makes changing from one parameter to another fast and easy.

GLP excellence
SevenMulti™ lets you enter up to 12-place sample, user and sensor IDs – you can even use a bar-code reader. The numeric sample ID can be incremented auto-sequentially.

Secure data management
SevenMulti™ guarantees rapid access to current results and calibration data. Saving, logging, recalling and PIN-code-protected deletion of measurement and calibration data has never been so easy.

Electrodes and accessories

The Seven electrode stand provides even more convenience and efficiency. Further practical Seven accessories and a selection of different electrodes are given at the end of this brochure.

Read

Reproducible results

Automatic, manual or timed endpoint formats with 3 selectable stability criteria allow rapid and accurate measurement value determinations with reproducible results.

Cal

Professional calibration

- Up to 9 calibration points with linear or segmented algorithms
- Multipoint conductivity calibration
- Automatic buffer recognition within the 8 predefined pH buffer groups
- Automatic standard recognition of the 5 predefined conductivity standards
- User-definable buffers and standards including their temperature dependence

Always at your fingertips

Context-sensitive help assists you with every step. Activating the routine mode simplifies operation still further by displaying only sample-specific settings.

Sensor monitoring

Electrode test

An integrated pH electrode test checks the slope, offset, drift and response time of your electrodes without changing your current calibration.

Calibration reminder

This useful function reminds you that a calibration is due after a user-defined period. The instrument can be set to block its use once this period has been exceeded – until the next valid calibration has been performed!

Security has priority

PIN-protected

The operation of the instrument and general system settings such as date and time can be protected through the use of a personal code.

Monitoring limits

You can define your own limits. If values fall below or exceed the limits, a warning appears on the display and on the GLP printout.

Method protection

Up to 40 user methods can be used to store all the settings relevant for a measurement – the user is sure that measurements are always performed in exactly the same way.

Complying with USP/EP standards

SevenMulti™ provides a special mode for measuring conductivity according to USP and EP (United States / European Pharmacopeia) methods.

SevenMulti™ comes in 5 models
– a variety of functions and specifications

SevenMulti™ S47

Two-channel pH and conductivity measurements

- Combines all functions of the S40 and S70
- Clear, two-channel measurements thanks to large display
- Context-sensitive Help menu

SevenMulti™ S47	Measuring range	Resolution	Accuracy
pH	-2.000 ... 19.999	0.001, 0.01, 0.1	±0.002
mV (rel. mV)	-1999 ... 1999	0.1	±0.1
Temperature	-30.0 ... 130.0 °C	0.1 °C	±0.1 °C
Conductivity	0.001 µS/cm ... 1000 mS/cm	0.001 ... 1	±0.5%
Temperature	-30.0 ... 130.0 °C	0.1 °C	±0.1 °C
TDS	0.01 mg/L ... 1000 g/L	0.01 ... 1	±0.5%
Resistivity	0.00 ... 20.00 MΩcm		
Salinity	0.00 ... 80.00 ppt		
Sensor inputs	BNC, 2 mm Ref., Cinch/RCA (NTC), 4 mm banana (PT1000), mini-DIN		
Interfaces	RS232 (connection to a printer or PC), titrator output		
Power requirements	Power module (9 V, DC)		
Size / Weight	190 x 240 x 65 mm / 1100 g		
Package / Weight	370 x 320 x 165 mm / 4.2 kg		

Ordering info.	Standard Equipment	Order No.
S47 (instrument)	Includes instrument, electrode holder, protective cover, operating instructions, declaration of conformity, test certificate and LabX® direct pH PC software	51302813
S47-K (kit)	As for S47, plus InLab®413 and InLab®730, Guide to pH and conductivity determination and 2 calibration sachets each: pH 4.01, 7.00 and 9.21 (or 10.00), and 1413 µS/cm and 12.88 mS/cm	51302814
S47-KS (Kit)	As for S47-K, with InLab®410 instead of InLab®413	51302865

SevenMulti™ S80

Ion meter of the super class

- Allows simultaneous two-channel pH/ion or ion/ion measurements
- Complete range of electrodes and accessories
- Expandable: Rondolino sample changer, printer and bar-code reader

SevenMulti™ S80	Measuring range	Resolution	Accuracy
Concentration	$1.00E^{-9}$ ... $9.99E^{+9}$	± last significant place	±0.5%
pH	-2.000 ... 19.999	0.001, 0.01, 0.1	±0.002
mV (rel. mV)	-1999 ... 1999	0.1	±0.1
Temperature	-30.0 ... 130.0 °C	0.1 °C	±0.1 °C
Sensor inputs	2 each: BNC, 2 mm Ref., Cinch/RCA (NTC), 4 mm banana (PT1000)		
Interfaces	RS232 (connection to a printer or PC)		
Power requirements	Power module (9 V, DC)		
Size / Weight	190 x 240 x 65 mm / 1125 g		
Package / Weight	370 x 320 x 165 mm / 4.2 kg		

Ordering info.	Standard Equipment	Order No.
S80 (instrument)	Includes instrument, electrode holder, protective cover, operating instructions, declaration of conformity, test certificate and LabX® direct pH PC software	51302811
S80-K (kit)	As for S80, plus InLab®413, instructions for ion sensitive measurements and 2 buffer sachets each: pH 4.01, 7.00 and 9.21 (or 10.00)	51302812
S80-KS (Kit)	As for S80-K, with InLab®410 instead of InLab®413	51302866

SevenMulti™ S40

Professional pH meter

- Expandable: Rondolino sample changer, printer and bar-code reader
- Excellent data management with 1000 GLP data points
- Selectable stability criteria

SevenMulti™ S40	Measuring range	Resolution	Accuracy
pH	-2.000 ... 19.999	0.001, 0.01, 0.1	±0.002
mV (rel. mV)	-1999 ... 1999	0.1	±0.1
Temperature	-30.0 ... 130.0 °C	0.1 °C	±0.1 °C
Sensor inputs	BNC, 2 mm Ref., Cinch/RCA (NTC), 4 mm banana (PT1000)		
Interfaces	RS232 (connection to a printer or PC)		
Power requirements	Power adapter (9 V, DC)		
Size / Weight	190 x 240 x 65 mm / 1065 g		
Package / Weight	370 x 320 x 165 mm / 4.1 kg		

Ordering info.	Standard Equipment	Order No.
S40 (instrument)	Incl. instrument, empty expansion unit, electrode holder, protective cover, operating instructions, declaration of conformity, test certificate and LabX® direct pH PC software	51302807
S40-K (kit)	As for S40, plus InLab®413, Guide to pH determination and 2 each buffer sachets pH 4.01, 7.00 and 9.21 (or 10.00)	51302808
S40-KS (Kit)	As for S40-K, with InLab®410 instead of InLab®413	51302864

SevenMulti™ S50

Single channel ion meter

- Choice of 26 pre-programmed electrode types
- Incremental ion measurement techniques
- Up to 9 calibration points
- Selectable stability criteria

SevenMulti™ S50	Measuring range	Resolution	Accuracy
Concentration	$1.00E^{-9}$ ... $9.99E^{+9}$	± last significant place	±0.5%
pH	-2.000 ... 19.999	0.001, 0.01, 0.1	±0.002
mV (rel. mV)	-1999 ... 1999	0.1	±0.1
Temperature	-30.0 ... 130.0 °C	0.1 °C	±0.1 °C
Sensor inputs	BNC, 2 mm Ref., Cinch/RCA (NTC), 4 mm banana (PT1000)		
Interfaces	RS232 (connection to a printer or PC)		
Power requirements	Power module (9 V, DC)		
Size / Weight	190 x 240 x 65 mm / 1065 g		
Package / Weight	370 x 320 x 165 mm / 4.1 kg		

Ordering info.	Standard Equipment	Order No.
S50 (instrument)	Incl. instrument, empty expansion unit, electrode holder, protective cover, operating instructions, declaration of conformity, test certificate and LabX® direct pH PC software	51302867
S50-K (kit)	As for S50, plus InLab®413, instructions for ion sensitive measurements and 2 buffer sachets each: pH 4.01, 7.00 und 9.21 (or 10.00)	51302868

SevenMulti™ S70

Conductivity meter of the luxury class

- Programmable user-defined calibration standards incl. temperature table
- USP/EP mode: satisfies the current requirements for purified and highly purified water
- Choice of 6 commercially available or user-defined calibration standards with temperature curve

SevenMulti™ S70	Measuring range	Resolution	Accuracy
Conductivity	0.001 µS/cm ... 1000 mS/cm	0.001 ... 1	±0.5%
Temperature	-30.0 ... 130.0 °C	0.1 °C	±0.1 °C
TDS	0.01 mg/L ... 1000 g/L	0.01 ... 1	±0.5%
Resistivity	0.00 ... 20.00 MΩcm		
Salinity	0.00 ... 80.00 ppt		
Sensor inputs	Mini-DIN		
Interfaces	RS232 (connection to a printer or PC), titrator output		
Power requirements	Power adapter (9 V, DC)		
Size / Weight	190 x 240 x 65 mm / 1040 g		
Package / Weight	370 x 320 x 165 mm / 4.1 kg		

Ordering info.	Standard Equipment	Order No.
S70 (instrument)	Incl. instrument, empty expansion unit, electrode holder, protective cover, operating instructions, declaration of conformity, test certificate and LabX® direct pH PC software	51302809
S70-K (kit)	As for S70, plus InLab®730, Guide to conductivity determination and 2 calibration sachets each: 1413 µS/cm and 12.88 mS/cm	51302810

The master of versatility
– SevenMulti™ with or without peripherals

		SevenMulti™ models				
	Functions and features	**S40**	**S50**	**S80**	**S47**	**S70**
Parameters	pH measurement	•	•	•	•	
	mV measurement	•	•	•	•	
	Relative mV	•	•	•	•	
	Ion concentration (mol/L, mmol/L, %, ppm, mg/L)		•	•		
	Conductivity				•	•
	TDS (total dissolved solids)				•	•
	Resistivity				•	•
	Salinity (UNESCO 1978, UNESCO 1966b)				•	•
Measurement	Selectable endpoint format (auto, manual, timed)	•	•	•	•	•
	Selectable stability criteria (fast, normal, strict)	•	•	•	•	
	Selectable pH resolution (X.XXX, X.XX, X.X)	•	•	•	•	
	ATC or MTC	•	•	•	•	•
	Timed interval readings	•	•	•	•	•
	Incremental ion measurement techniques		•	•		
Calibration	Calibration points	5	9	9	5	5
	Predefined pH buffer groups / conductivity standards	8	8	8	8 / 6	6
	User-defined buffer group / standard	1	1	1	1	1
	Auto pH buffer / conductivity standard recognition	•	•	•	•	•
	Calibration reminder	•	•	•	•	•
	pH electrode test	•	•	•	•	
Conductivity	Special USP / EP mode				•	•
	Selectable reference temperature (20°C or 25°C)				•	•
	Linear & non-linear temperature correction				•	•
	Procedure for automatic α-coefficient determination				•	•
	Entry and display of cell constant				•	•
Communication	LabX® direct PC software (standard delivery)	•	•	•	•	•
	RS232 communication	•	•	•	•	•
	Optional TTL or USB communication	•	•	•	•	•
	Special analogue output				•	•
	Selectable printout formats (short, standard, GLP)	•	•	•	•	•
	Automation with Rondolino sample changer	•	•	•	•	•
	Automation with barcode reader	•	•	•	•	•
	LIMS compatibility	•	•	•	•	•
Security	Full GLP support	•	•	•	•	•
	Time and date	•	•	•	•	•
	Entry of sample ID, sensor ID and SN, user ID	•	•	•	•	•
	ID input with barcode reader or alphanumerical keypad	•	•	•	•	•
	User-defined alarm limits	•	•	•	•	•
	PIN code protection (instrument login, system settings, deletion of data)	•	•	•	•	•
	Routine / Expert mode	•	•	•	•	•
System	Context sensitive help menu	•	•	•	•	•
	Memory (1000 readings, 400 calibrations, 40 methods)	•	•	•	•	•
	Extensive filter functions	•	•	•	•	•
	Multilingual menu-guided operation	•	•	•	•	•
	Back-lit display	•	•	•	•	•
	Meter self diagnosis	•	•	•	•	•
	Expandability to dual channel instrument	•	•			•

Automation increases efficiency
Efficiency is significantly increased using peripherals such as sample changers and bar-code readers – not only for high throughput applications. Calibrations and two-channel measurements can be automated using the Rondolino sample changer.

Flexible printout formats
You have the choice of three different printout formats: The GLP printout exports all the information via the interface, including the date and time of the last calibration. The standard printout includes everything relevant to the measurement. The short format contains just the measurement result and the temperature.

Unique assignment
Sample IDs can be entered securely and uniquely using the bar-code reader before or during the measurement without additional instrument commands. The user name, sensor ID and serial number can also be automatically recorded in this way.

LabX® direct pH
The user-friendly PC software archives your results quickly and securely. It allows user-defined data to be transferred from SevenEasy™, SevenMulti™ and SevenGo pro™ to an application such as MS Excel. The values can be automatically displayed in the Excel templates supplied.

SevenGo™
– ergonomic analysis

- **Portable measuring instruments for pH, conductivity, oxygen and ion analysis**
- **Robust measuring system for use under difficult conditions**
- **Efficiency thanks to unique ergonomic design and ease of use**
- **Comprehensive service package including IQ/OQ/PQ**

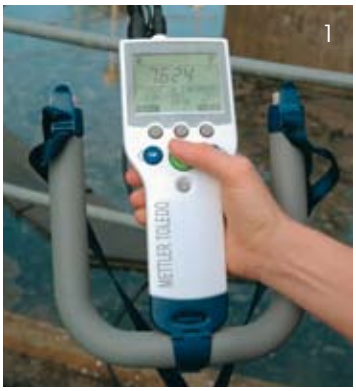
Ergonomic masterpiece
SevenGo™ fits your hand perfectly, irrespective of whether you are right or left handed. The size of the buttons is directly related to their importance. SevenGo™ is so easy to use that you really can save time with it.

SevenGo™ – Working in the field becomes a pleasure
The new METTLER TOLEDO SevenGo™ instrument line performs very impressively in the field. The portable measuring system is rounded off by the excellent quality of the sensors and ingenious accessories. SevenGo™ is future-orientated in so many respects and greatly simplifies your work.
Enjoy your work with SevenGo™.

SevenGo™ electrode clip
The rotatable electrode clip can be mounted on the left or the right of all SevenGo™ instruments. It allows single-handed measurement and saves space when the electrode is not being used.

Watertight and dustproof to IP67
SevenGo™ satisfies the requirements of IP67. This applies both to the entire measurement system with connected electrodes and to the instrument itself. SevenGo™ is ready for the worst possible measurement environments.

What is IP67?
The IP (Ingress Protection) standard consists of two digits: **6** means that SevenGo™ is completely dustproof; **7** means that SevenGo™ remains watertight for 30 minutes at a depth of 1 meter.



At a glance
SevenGo™'s large display shows all the relevant settings and highlights the most important items. You can read the measured value and check the condition of the electrode at a glance.

Data management
In the development of SevenGo™, special attention was paid to the operation of the data memory. Data can be measured, saved and deleted faster and easier than with any other meter.

ErGo™ – the helpful assistant
The field assistant ErGo™ is a synonym for perfect convenience when you are carrying it for use in production, in the laboratory or in the field. ErGo™ is readily adjustable and can be used for a variety of functions.

1) ErGo™ fits your hand perfectly providing safe and easy operation.
2) Together with the strap supplied, ErGo™ takes the load off your hands. Enjoy the new freedom.
3) pH electrodes can be stored wet in ErGo™ and are immediately ready for use without watering caps.
4) ErGo™ converts SevenGo™ into a mobile bench-top instrument.

Transport protection and workplace
The newly developed SevenGo™ case provides lots of space to house all the important utensils, cables and electrodes you need. At the same time it can be used as a workplace. Thanks to its intelligent design and the specially developed electrode stand, the case becomes a mobile measuring station. The robust hard-surface construction is very easy to clean.

SevenGo pro™
– the small difference

- **Intuitive menu operation using softkeys**
- **Separate operating modes for experts and routine use**
- **GLP memory for 200 data points**
- **Contact-free infrared communication**
- **Revolutionary accessories and advanced sensor technology**

SevenGo pro™
– from A to Z professional

The SevenGo pro™ meters use the same excellent sensors and cleverly designed accessories as the SevenGo™ SG2 and SG3 models. In addition, the SevenGo pro™ SG6, SG7 and SG8 instruments provide features that satisfy the highest demands of measurement accuracy and operating convenience. Choose for yourself which portable meter offers the best solution for your electrochemical tasks.

Infrared communication
The IR interface sends data to your notebook without a cable connection, or to a printer or PC by means of an IR adapter. The IR window of SevenGo pro™ is hermetically sealed in the housing and provides the greatest possible protection against water and dust.

Illumination
The bright backlit display can be switched on as desired and facilitates your work under poor light conditions. The interval for switching it off can be individually programmed, thus prolonging the lifetime of your batteries. Maximize operating convenience.

Barometric pressure
The SevenGo pro™ SG6 model for dissolved oxygen measures the air pressure using an integrated barometer. Fluctuations in air pressure are automatically compensated and the reproducibility of the oxygen measurement is thus increased.

Expert mode
The expert decides! Make use of the entire range of functions to reconfigure your meter in the laboratory.

Routine mode
In this mode you can work really quickly with the SevenGo pro™ because the settings relevant for the measurement are fixed ready to select.

Routine and Expert mode
A concept that has proven successful with large analytical instruments has now been introduced with the SevenGo pro™ for portable measurements. De-activation of all the functions not required for routine measurements converts SevenGo pro™ into a basic working instrument at the press of a button. Now, settings cannot be changed by mistake.

Menu operation using softkeys
Operate your SevenGo pro™ using softkeys, with interactive function boxes on the display. Instrument configuration and data management are carried out in this way, most flexibly and very conveniently. Menu guidance just like with big instruments!

Three reliable sensors
The SevenGo™ instruments are standardly equipped with high-performance electrodes. All three sensors are based on products that have proven themselves many times, and which combine robustness with precise measurement technology:
InLab®413 SG (IP67), low-maintenance pH electrode with Xerolyt® polymer electrolyte and PEEK shaft
InLab®737 (IP67), conductivity cell with minimum sample carryover and maximum linearity
InLab®605 (IP67), an oxygen sensor based on precise process analysis

		SevenGo™		SevenGo pro™		
	Functions and features	**SG2**	**SG3**	**SG6**	**SG7**	**SG8**
Parameters	pH measurement	•				•
	mV measurement	•				•
	Relative mV					•
	Ion concentration (mol/L, mmol/L, %, ppm, mg/L)					•
	Conductivity		•		•	
	TDS (total dissolved solids)		•		•	
	Resistivity		•		•	
	Salinity (UNESCO 1978)		•		•	
	Dissolved oxygen			•		
	Barometric pressure			•		
	Temperature	•	•	•	•	•
Measurement	Automatic and manual endpoint format	•	•	•	•	•
	Timed endpoint format			•	•	•
	Time interval measurement			•	•	•
Calibration	Calibration points	3	1	2	1	5
	Buffer groups / Standards	4	3	1	3	6
	User-defined standards	•			•	•
	Calibration reminder			•	•	•
Conductivity	Linear temperature compensation		•		•	
	Non-linear temperature compensation				•	
	Manual entry of the cell constant				•	
Security	Date and time			•	•	•
	Routine and expert modes			•	•	•
	GLP-Data memory	30	30	200	200	200
	Sensor and Sample ID			•	•	•
System	Display illumination			•	•	•
	Infrared interface			•	•	•
	Menu guidance using softkeys			•	•	•
	Use of ErGo™	•	•	•	•	•
	Watertight according to IP67	•	•	•	•	•
	Power: 4 AA batteries or 4 NiMH accumulators	•	•	•	•	•

5 Models SevenGo™ and SevenGo pro™ – kit versions and specifications

Content SevenGo™ kit versions	B Only meters	ELK Kit with electrode	FK2 Field kit 1.8 m	FK10 Field kit 10 m	ASK Kit with ErGo™
Meter	•	•	•	•	•
IP67 sensor with 1.8 m fix cable and clip		•	•		•
IP67 sensor with 10 m fix cable and clip				•	
Field case with field electrode arm, 4 sample bottles, 4 calibration beakers and calibration sachets (pH: 6 pcs., conductivity: 4 pcs.)			•	•	•
ErGo™ (Field assistant)					•
All kit versions include: wrist strap, 4 AA batteries, operating instructions, test certificate and declaration of conformity					

SevenGo™ pH – SG2

pH meter (IP67) for routine use

- Continuous indication of electrode and battery status
- Automatic endpoint and buffer recognition as well as temperature compensation
- Data memory for 30 GLP data points
- 3-point calibration with predefined or user-defined buffers

SevenGo™ SG2	Measuring range	Resolution	Accuracy
pH	0.00 ... 14.00	0.01	±0.01
mV	-1999 ... 1999	1	±1
Temperature	-5.0 ... 105.0 °C	0.1 °C	±0.5 °C
Sensor inputs	BNC (>10^{12} Ω); NTC 30 KΩ (both IP67)		
Outputs	--		
Power requirements	4 AA batteries 1.5 V or NiMH accumulators 1.3 V		
Operating environment	0 ... 40 °C, 5 ... 85% rel. humidity (non-cond.)		
Size / Weight	220 x 90 x 45 mm / 325 g (without batteries)		

Kit	Description and sensors	Order No.
SG2-B	Meter only	51302521
SG2-ELK	Electrode kit with InLab®413 SG (IP67)	51302522
SG2-FK	Field kit with InLab®413 SG (IP67)	51302523
SG2-ASK	Assistant kit with InLab®413 SG (IP67)	51302525

SevenGo™ conductivity – SG3

Conductivity meter (IP67) for everyday work

- Automatic endpoint recognition and temperature compensation
- Pre-defined standards: 84 µS/cm, 1413 µS/cm or 12.88 mS/cm
- Data memory for 30 GLP data points
- Complete range of electrodes

SevenGo™ SG3	Measuring range	Resolution	Accuracy
Conductivity	0.10 µS/cm ... 500 mS/cm	0.10 1	±0.5%
Temperature	-5.0 ... 105.0 °C	0.1 °C	±0.2 °C
TDS	0.01 mg/L ... 300 g/L	0.01 ... 1	±0.5%
Resistivity	0.00 ... 100.00 MΩcm		
Salinity	0.00 ... 80.00 ppt		
Sensor inputs	LTW 7 pin (IP67)		
Outputs	--		
Power requirements	4 AA batteries 1.5 V or NiMH accumulators 1.3 V		
Operating environment	0 ... 40 °C, 5 ... 85% rel. humidity (non-cond.)		
Size / Weight	220 x 90 x 45 mm / 325 g (without batteries)		

Kit	Description and sensors	Order No.
SG3-ELK	Electrode kit with InLab®737 (IP67)	51302531
SG3-FK2	Field kit with InLab®737 (IP67), 1.8 m cable	51302532
SG3-FK10	Field kit with InLab®737/10m (IP67), 10 m cable	51302533
SG3-ASK	Assistant kit with InLab®737 (IP67)	51302534

SevenGo pro™ dissolved oxygen – SG6

Professional oxygen instrument (IP67)

- Manual or automatic air pressure compensation with built-in barometer
- High-performance O_2 sensor
- Comprehensive range of accessories
- Data memory for 200 GLP data points
- Backlit display (applies to all SevenGo pro™ models)

SevenGo pro™ SG6	Measuring range	Resolution	Accuracy
Saturation	0.0 ... 600%	0.1 ... 1	±0.5%
Temperature	0.0 ... 60.0 °C	0.1 °C	±0.1 °C
mg/L, ppm	0.00 ... 99.00	0.01	±0.5% max. 0.03
Pressure	500 ... 1100 mbar	1	±1
Sensor inputs	BNC (>10^{12} Ω); NTC 22 KΩ (both IP67)		
Outputs	IR to printer or PC via RS232 or USB		
Power requirements	4 AA batteries 1.5 V or NiMH accumulators 1.3 V		
Operating environment	0 ... 40 °C, 5 ... 85% rel. humidity (non-cond.)		
Size / Weight	220 x 90 x 45 mm / 325 g (without batteries)		

Kit	Description and sensors	Order No.
SG6-ELK	Electrode kit with InLab®605 (IP67)	51302561
SG6-FK2	Field kit with InLab®605 (IP67), 1.8 m cable	51302562
SG6-FK10	Field kit with InLab®605/10m (IP67), 10 m cable	51302563
SG6-ASK	Assistant kit with InLab®605 (IP67)	51302564

SevenGo pro™ conductivity – SG7

Professional conductivity meter (IP67)

- Calibration also with user-definable standard or cell constant
- Linear and non-linear temperature compensation
- Measurement of purified water according to USP/EP
- Data memory for 200 GLP data points
- Comprehensive GLP functions with sensor and sample identification

SevenGo pro™ SG7	Measuring range	Resolution	Accuracy
Conductivity	0.01 µS/cm ... 1000 mS/cm	0.01	±0.5%
Temperature	-5.0 ... 105.0 °C	0.1 °C	±0.1 °C
TDS	0.01 mg/L ... 600 g/L	0.01 ... 1	±0.5%
Resistivity	0.00 ... 100.00 MΩcm		
Salinity	0.00 ... 80.00 ppt		
Sensor inputs	LTW 7 pin (IP67)		
Outputs	IR to printer or PC via RS232 or USB		
Power requirements	4 AA batteries 1.5 V or NiMH accumulators 1.3 V		
Operating environment	0 ... 40 °C, 5 ... 85% rel. humidity (non-cond.)		
Size / Weight	220 x 90 x 45 mm / 325 g (without batteries)		

Kit	Description and sensors	Order No.
SG7-ELK	Electrode kit with InLab®737 (IP67)	51302571
SG7-FK2	Field kit with InLab®737 (IP67), 1.8 m cable	51302572
SG7-FK10	Field kit with InLab®737/10m (IP67), 10 m cable	51302573
SG7-ASK	Assistant kit InLab®737 (IP67)	51302574
SG7-USP/EP	As for SG7-ELK, with InLab®740 instead of InLab®737	51302575

SevenGo pro™ pH/Ion – SG8

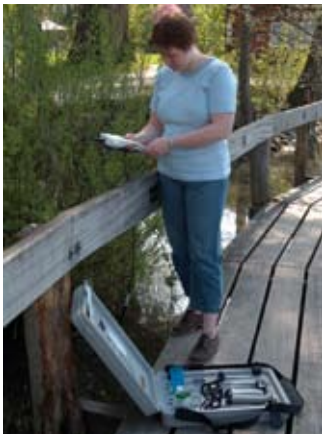
pH/Ion meter (IP67) for highest demands

- Simple ion concentration determination
- Time interval measurement with automatic data logging
- Data memory for 200 GLP data points
- Segmented or linear calibration as desired
- 5-point calibration with choice of 6 predefined and one user-defined buffer set

SevenGo pro™ SG8	Measuring range	Resolution	Accuracy
pH	-2.000 ... 19.999	0.001	±0.002
mV (rel. mV)	-1999 ... 1999	0.1	±0.1
Temperature	-5.0 ... 130.0 °C (ATC) -30.0 ... 130.0 °C (MTC)	0.1 °C	±0.2 °C
Sensor inputs	BNC (>10^{12} Ohm); NTC 30 KΩ (both IP67)		
Outputs	IR to printer or PC via RS232 or USB		
Power requirements	4 AA batteries 1.5 V or NiMH accumulators 1.3 V		
Operating environment	0 ... 40 °C, 5 ... 85% rel. humidity (non-cond.)		
Size / Weight	220 x 90 x 45 mm / 325 g (without batteries)		

Kit	Description and sensors	Order No.
SG8-B	Meter only	51302581
SG8-ELK	Electrode kit with InLab®413 SG (IP67)	51302582
SG8-FK	Field kit with InLab®413 SG (IP67)	51302583
SG8-ASK	Assistant kit with InLab®413 SG (IP67)	51302584

Accessories
– the final touch

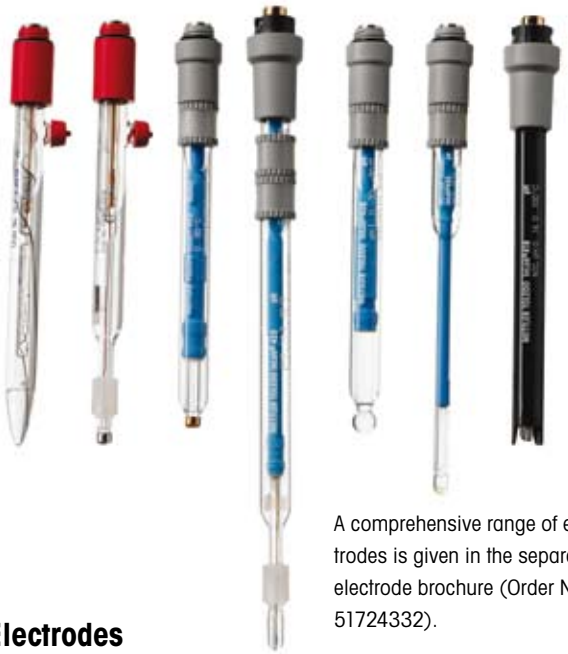


SevenGo™

Accessories for SevenGo™	Order No.
Communication (for models SG6, SG7, SG8)	
Infrared-USB adapter	51302332
Infrared-RS232 adapter	51302333
LabX® direct pH PC software	51302876
ErGo™ accessories	
ErGo™ field assistant	51302320
ErGo™ electrode tube	51302323
ErGo™ adapter	51302337
Other accessories	
SevenGo™ clip	51302325
Wrist strap	51302331
Neck strap	51302321
SevenGo™ bottom cap (blue)	51302324
Rubber feet (2 pcs.)	51302335
Clip cover	51302327
Battery cover	51302328
SevenGo™ sealing kit	51302336
Field case accessory kit	51302360
LTW/mini-DIN adapter (conductivity)	51302329
Field electrode arm	51302334
SevenGo™ field case (empty)	51302330

SevenEasy™
SevenMulti™

Accessories for SevenMulti™	Order No.
Modules	
pH/mV expansion unit (SevenMulti™)	51302821
Conductivity expansion unit (SevenMulti™)	51302822
Ion/pH expansion unit (SevenMulti™)	51302823
ISFET expansion unit (SevenMulti™)	51302824
TTL communication module (SevenMulti™)	51302825
USB communication module (SevenMulti™)	51302826
Empty expansion unit	51302874
Other accessories	
SevenMulti™ protective cover	51302819
Electrode stand, complete	51302820
Sample changer and accessories	
Sample changer Rondolino, complete	51108500
Propeller stirrer incl. 2 stirring rods	51109150
Seven/Rondolino stirrer driver (connection kit)	51302827
Disposable cups for Rondolino, 1400 pcs	00101974
Accessories for bar code reading (only SevenMulti™)	
Bar code reader	21901297
RS232 F cable	21901305
Null modem adapter, 9P M/M	21900924
Power adaptor, 5V	21901311
Power adaptor EU	21901313
Power adaptor UK	21901314
Power adaptor US	21901315
Power adaptor AUS	21901316
Accessories for SevenEasy™ and SevenMulti™	
LabX® direct pH PC software	51302876
Power adapter EU	51302870
Power adapter US	51302871
Power adapter UK	51302872
Power adapter JP	51302873



A comprehensive range of electrodes is given in the separate electrode brochure (Order No. 51724332).

Electrodes

Electrodes and accessories	Order No.
pH-electrodes	
InLab®405	51340261
InLab®413	52000100
InLab®413 SG (SevenGo™)	51340288
InLab®413 SG / 10m (SevenGo™)	51340289
InLab®412	52000112
InLab®410 (ATC)	52000118
InLab®418	52000104
InLab®420 (movable sleeve junction)	52000113
InLab®423 (micro)	52000124
InLab®427 (puncture)	52000109
S7-BNC cable (1.2 m)	52300004
MultiPin-BNC/Cinch cable (1.2 m)	52300009
Conductivity probes	
InLab®710	51302256
InLab®720	51302255
InLab®730	51302119
InLab®740	51340260
InLab®737 (SevenGo™)	51340277
InLab®737 / 10m (SevenGo™)	51340278
InLab®717 (titration)	51302401
SevenMulti™-DL series cable (conductivity)	51302258
DO accessories	
InLab®605 (SevenGo™)	51340291
InLab®605 / 10m (SevenGo™)	51340292
InLab®605 membrane kit (3 pcs.& electrolyte)	51340293
InLab®605 electrolyte (25 mL)	51340294
InLab®605 sealing kit	51340295
InLab®605 calibration bottle	51340296
Electrode weight	51303019
Zero oxygen tablets, 20 pcs	51300140

Consumables

Solutions	Order No.
pH 4.01 buffer sachets, 30 x 20 mL	51302069
pH 7.00 buffer sachets, 30 x 20 mL	51302047
pH 9.21 buffer sachets, 30 x 20 mL	51302070
pH 10.01 buffer sachets, 30 x 20 mL	51302079
Rainbow I (3 x 10 sachets 20 mL 4.01/7.00/9.21)	51302068
Rainbow II (3 x 10 sachets 20 mL 4.01/7.00/10.01)	51302080
pH 4.01 buffer solution, colour red, 6 x 250 mL	51340058
pH 7.00 buffer solution, colour green, 6 x 250 mL	51340060
pH 9.21 buffer solution, colour blue, 6 x 250 mL	51300194
pH 10.01 buffer solution colourless, 6 x 250 mL	51340231
1413 µS/cm conductivity standard, 30 x 20 mL	51302049
12.88 mS/cm conductivity standard, 30 x 20 mL	51302050
84 µS/cm conductivity standard, 500 mL	51302153
1413 µS/cm conductivity standard, 250 mL	51300138
12.88 mS/cm conductivity standard, 250 mL	51300139

General accessories	Order No.
Plastic sample cups (50 mL)	51300240
Guide to pH measurement	51300047
Guide to conductivity and dissolved oxygen	51724716
Guide to ion selective measurement	51300075
RS-P42 printer	00229265
RS232 cable (SevenEasy™, SevenMulti™)	51302125

METTLER TOLEDO
– a world of possibilities ...

... everything and much more.

The innovative electronic engineering of the Seven line has been combined with INGOLD's 50 years of experience in producing electrochemical sensors.

METTLER TOLEDO is a system supplier for pH, conductivity, dissolved oxygen and ion measurements:

- Seven – State-of-the-art range of instruments
- Comprehensive range of electrodes
- Useful accessories
- All necessary technical services

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