

# PRIMELAB 2.0

DEVELOPED  
in GERMANY



## THE ULTIMATE PHOTOMETER

18 WAVELENGTHS (410-940 NM)

QR-CODE SCANNER PROBE-CONNECTOR

MULTILINGUAL 5.5" HD-TOUCH-DISPLAY

MORE THAN 140 PARAMETERS

WIFI USB BLUETOOTH

SOFTWARE / APP / CLOUD

SELF CALIBRATION



# Content

## The PrimeLab 2.0 - Truly different

The next generation of Photometers. The PrimeLab 2.0 launched by Water-i.d..

Highly accurate readings on 18 parallel wavelengths, Bluetooth-USB-WiFi-GSM-connections, powerful software and app, synchronized over a cloud-service, large HD touch display and the option to connect test probes are just some features of the new PrimeLab 2.0 which supersedes the well established PrimeLab 1.0, launched in 2013. On the following pages you will learn about how powerful the PrimeLab 2.0 and connected software/app/cloud are.



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Cooling Towers   Potable Water   Food processing   Waste Water  
Marine Industry   Boiler Water   Water Plants   Laboratories

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# Features

More than 140 parameters

- Turbidity (NTU), PTSA, Fluorescein built-in
- Multi-Connectivity Bluetooth®, WiFi, USB, GSM
- Probe-Connector (pH/EC/TDS/Temp/ORP)\*
- Step-by-step instructions with animations
- Software / App / Cloud
- Intelligent One-Time-Zero (OTZ)
- 18 wavelengths (410-940 nm)
- 5.5" color/HD Touch-Display
- Camera (QR-Code Scanner)
- 8400 mAh Llo-battery
- Self Calibration mode with Certificate
- Multilingual
- USB Type C for charging, data transfer, probe-connection and GSM-modem



\*via USB Internet Stick

# 18 wavelengths sensor technology

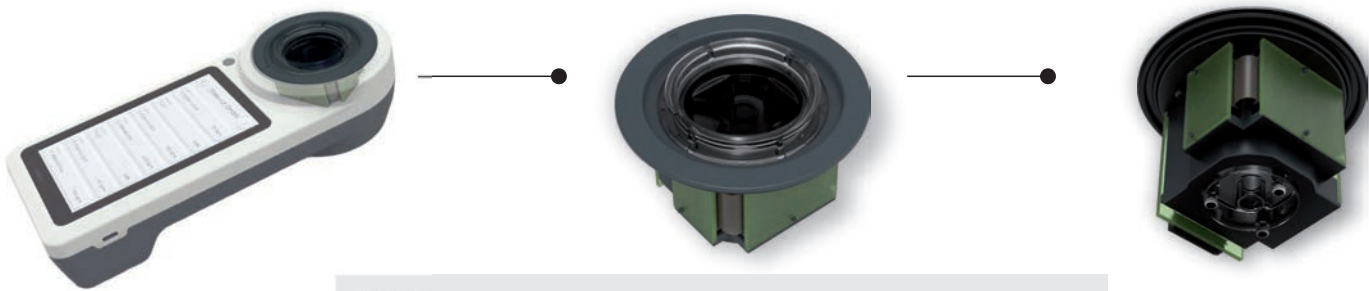
UV - VIS - IR  
peaks at:

410nm	435nm	460nm	485nm	510nm	535nm
560nm	585nm	610nm	645nm	680nm	705nm
730nm	760nm	810nm	860nm	900nm	940nm

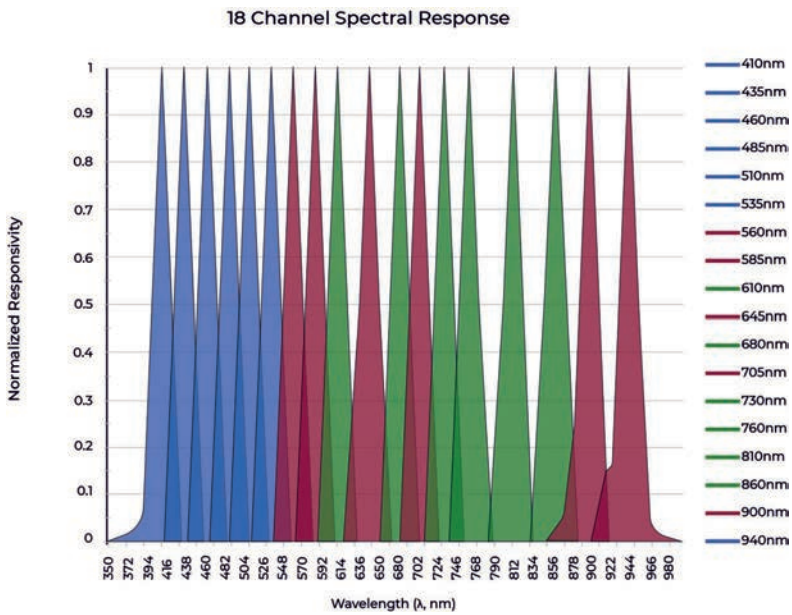
Whilst normal Photometers perform tests on one selected wavelength only, the PrimeLab 2.0 receives data from 18 different wavelengths in parallel with each measurement, covering the key parts of UV and IR section of the Spectrum and the full VIS range.

3 sensors with 6 wavelengths each are connected to each other. Correspondent LEDs are set up at 180° as well as at 90° to enable NTU-Turbidity, PTSA and Fluorescein measurements as well. Very narrow peaks between 390 and 950 nm allow utmost accurate readings, similar to the performance of a spectrophotometer.

The highly professional PrimeLab 2.0 firmware interpolates between the different wavelength-readings whilst parameter curves are set up to use multiple wavelengths to obtain the most accurate test results.



The built-in SmartChamber has 3 PCBs, connected to each other. The MASTER PCB receives LED signals from either 180° (direct) or 90° (indirect), required for NTU-Turbidity and water samples which need to be excited, such as for PTSA, Fluorescein or Plankton.



18 wavelengths throughout the UV - VIS - IR range are covered by sensors used by the PrimeLab 2.0. Narrow peaks on the spectral curve allow utmost accuracy.

# 5.5" Color-HD-Touch Display



The PrimeLab 2.0 features a state-of-the-art 5.5" colour HD touch-display.

The large display gives a perfect overview of all basic info, such as battery status, bluetooth, WiFi and GSM connectivity and offers highest flexibility for you to arrange icons as you would on your smartphone.

Each and every parameter-method comes with step-by-step instructions in many different languages plus useful animations and links to user videos, ensuring the correct procedure is followed to get the measurement result accurate and correct.

With the large 5.5" display, there is no need to connect to the phone-app anymore (which still is available if you prefer).

All data can be managed easily on-board the PrimeLab 2.0.



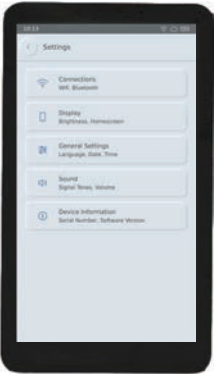
The PrimeLab 2.0 Home-Screen



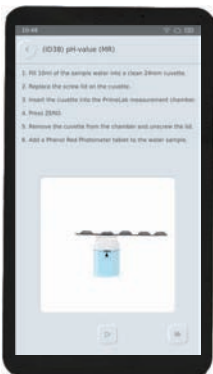
Managing Accounts (Water-Sites)



Scan QR codes (water-sites or reagents)



Choose from many different languages

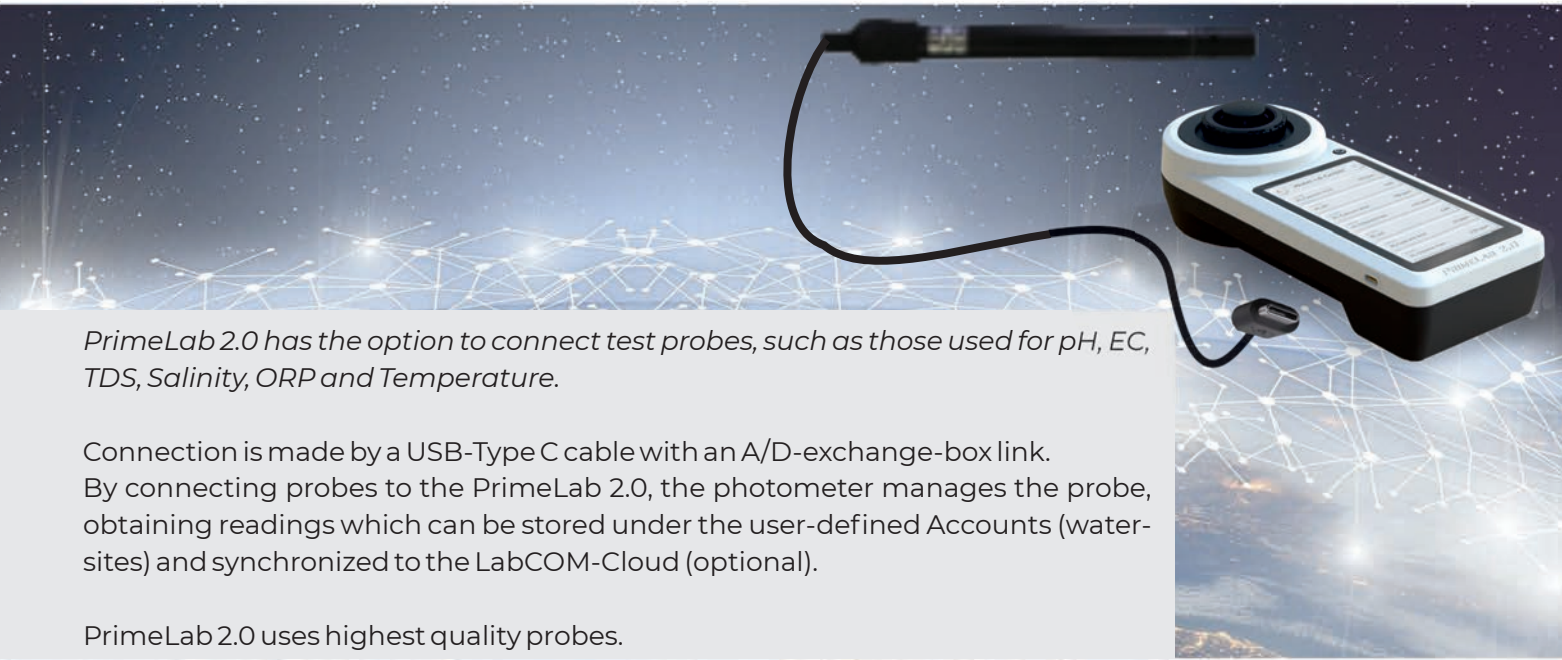


Step by Step Instructions with animations



# PRIMELAB 2.0 and probes

pH - EC - TDS - ORP - Temp.



PrimeLab 2.0 has the option to connect test probes, such as those used for pH, EC, TDS, Salinity, ORP and Temperature.

Connection is made by a USB-Type C cable with an A/D-exchange-box link. By connecting probes to the PrimeLab 2.0, the photometer manages the probe, obtaining readings which can be stored under the user-defined Accounts (water-sites) and synchronized to the LabCOM-Cloud (optional).

PrimeLab 2.0 uses highest quality probes.

## Adapters for different vials

PrimeLab utilises 24mm glass vials, 16mm glass vials and 1ml Eppendorf vials.

The vial adapter can easily be changed and replaced with a simple, built in, bayonet lock.



24mm vial adapter (standard)



1ml Eppendorf vial adapter (e.g.: for Legionella testing)



16mm vial adapter (e.g.: for COD testing)

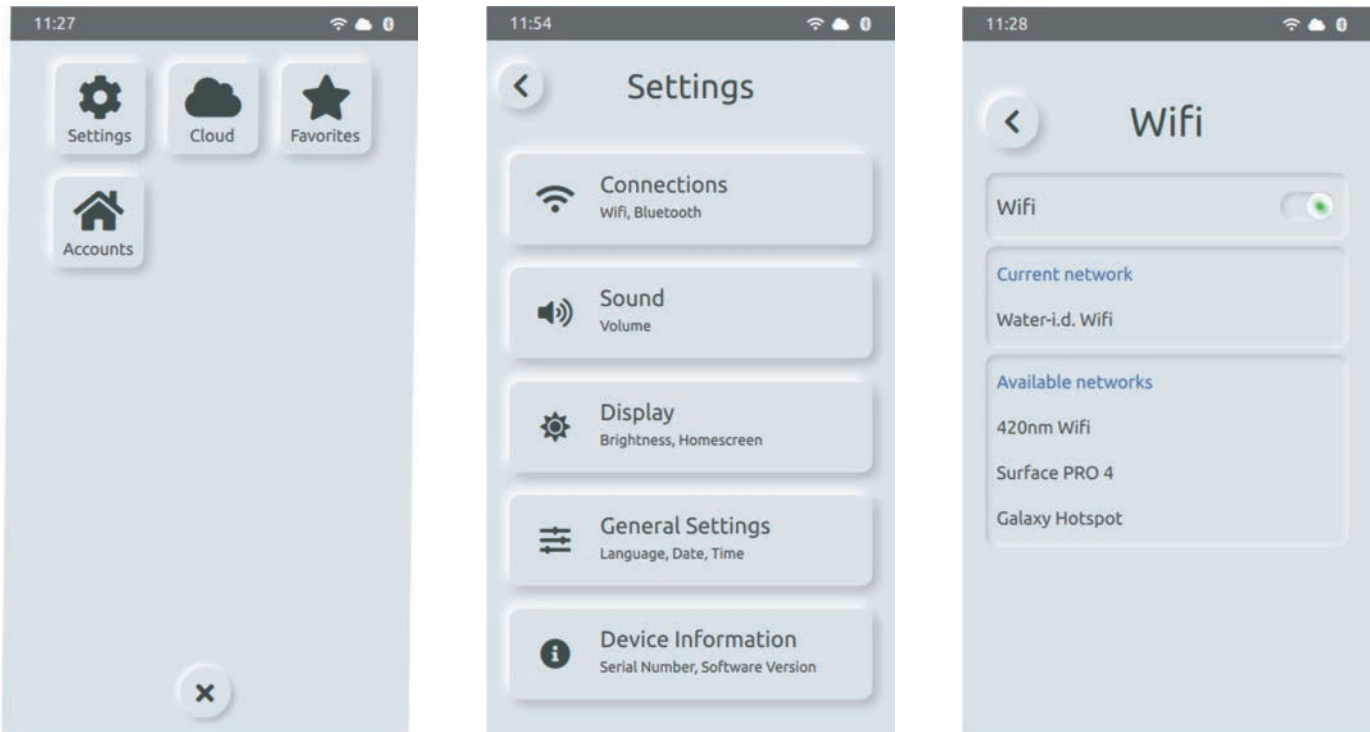
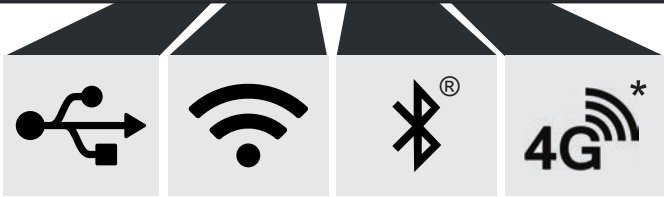
# Connecting PRIMELAB 2.0

USB - WiFi - Bluetooth - GSM

Over time, water testing became much more than just about testing. Real-time availability of reliable test results plus data management are as important as the test results itself.

*The PrimeLab 2.0 is the ultimate for connectivity!*  
Bluetooth, WiFi, USB (Type C) and GSM (via USB-modem) are available for multiple options to connect the PrimeLab 2.0 with a smartphone, tablet, computer or directly with the LabCOM cloud.

Wherever the tests are performed, whether in a lab, on site or on a ship, cooling tower - in fact anywhere - data can easily and automatically be transferred.



Easy setup of connection options - as on your smartphone

# LABCOM

## App - Software - Cloud



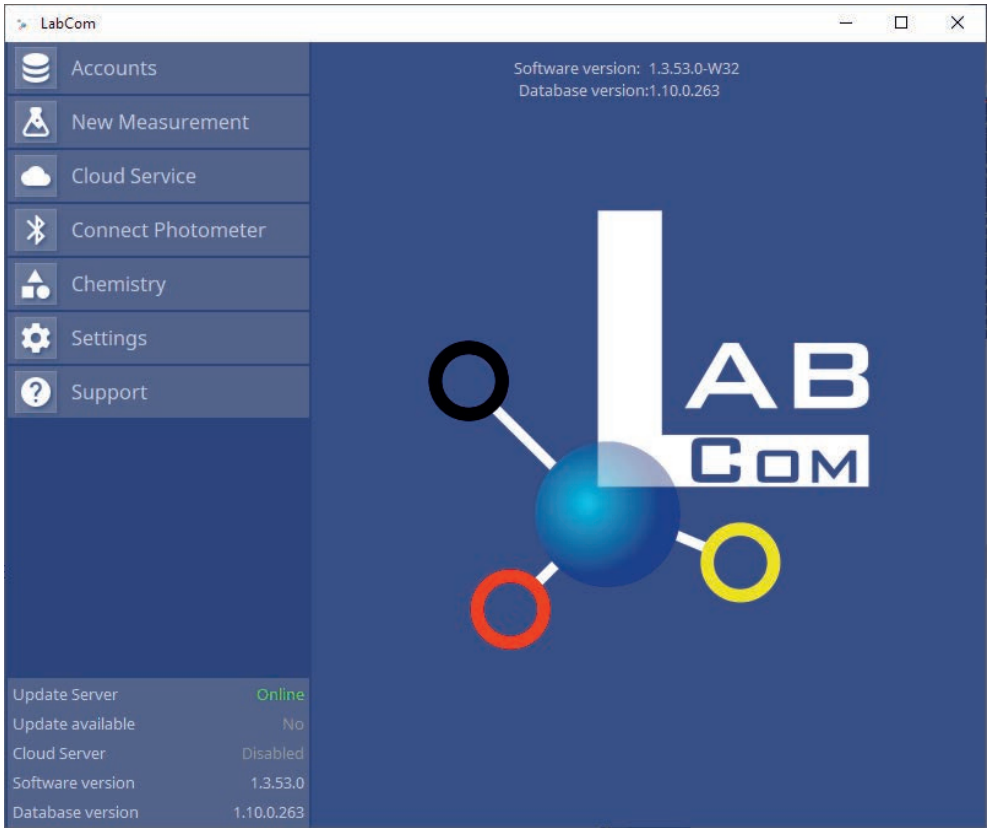
The most powerful LabCOM app/software/cloud-solution, developed over many years and in use with the PrimeLab 1.0 along with the PoolLab, also connects and runs with the PrimeLab 2.0.

The PrimeLab 2.0 along with the LabCOM app and software allows you to create unlimited accounts (water sites or locations) and to enter individual water treatment chemicals, both are synchronized via the LabCOM cloud.

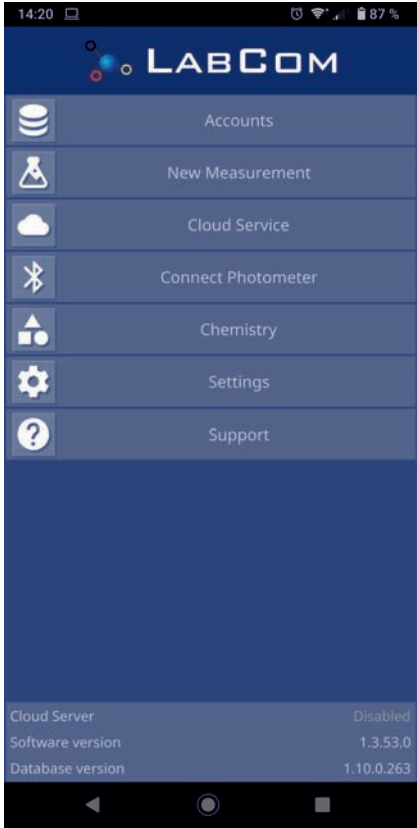
Reports can be created, printed or sent, dose recommendations can be created and statistics can be run.

Also featured the admin-tool allows you to create rules, such as: needs to be tested daily or: test result must be in between... and gives warnings when these rules are broken.

With the admin tool, the user also can grant access to other users, such as customers or headquarters, with full flexibility to select what information shall be shared.



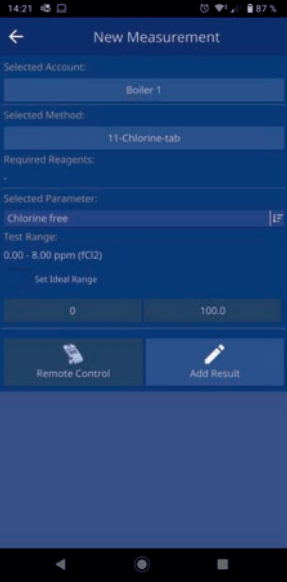
LabCOM software runs under Windows and Mac



LabCOM App runs under Android and iOS



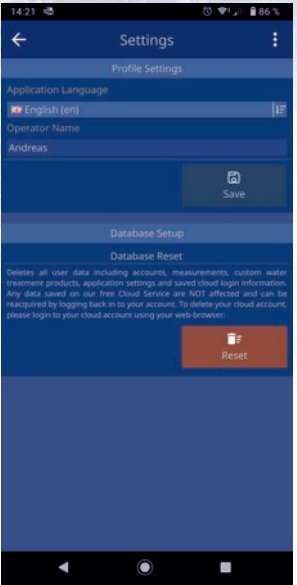
Unlimited user-defined Accounts (water-sites or locations)



Remote control and/or enter manual results



User defined water treatment chemicals for dosage recommendation



Set operator, language and backup data



Choice of languages



Full support menu, including user manuals, videos and FAQ links



# LABCOM Cloud

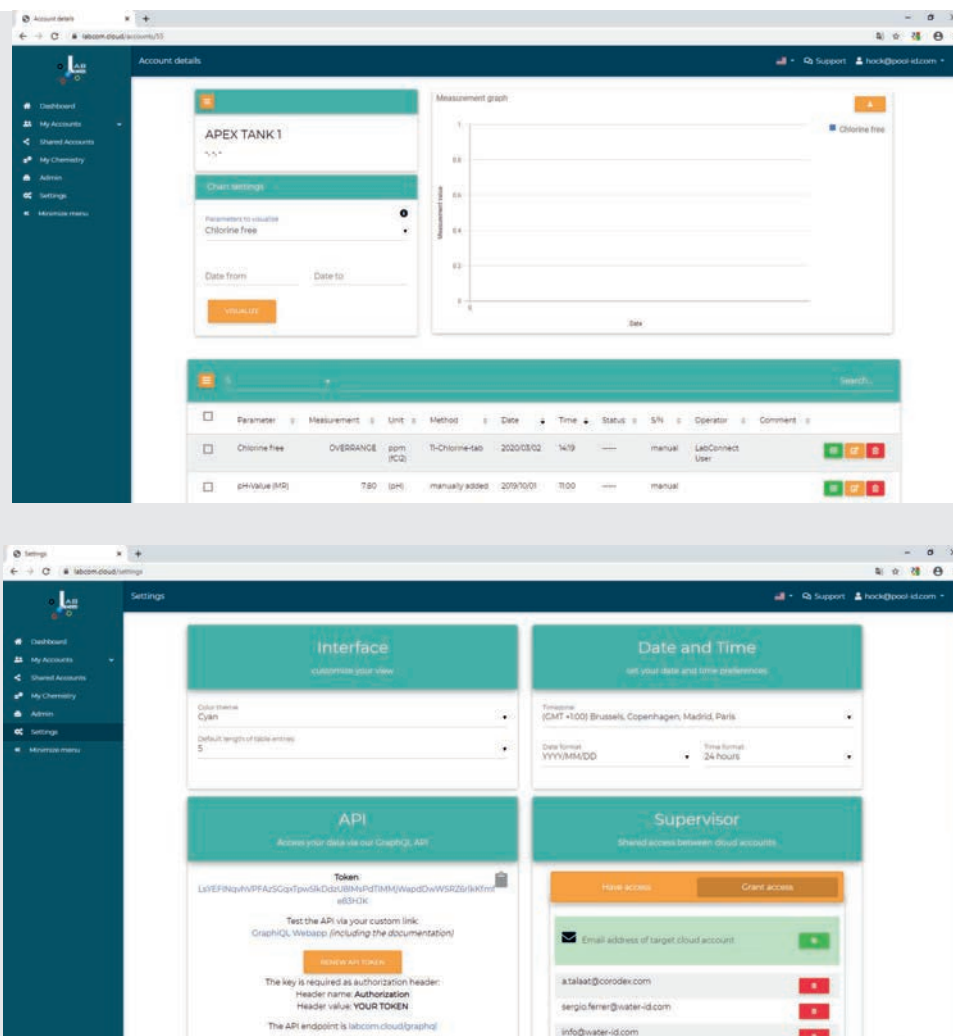
# PRIMELAB 2.0 Camera

## In-built Camera



The LabCOM cloud solution (free of charge) requires less than a minute for registration and provides full access to all test results, accounts (water-sites or locations) and individual water treatment chemicals either through a regular internet browser (<http://labcom.cloud>) or on a smartphone (Android/iOS), tablet or on a computer (Windows / Mac). Data is synchronized automatically and instantly available to review.

The LabCOM cloud includes the admin-tool to set up rules, run statistics and grant access to selected users.



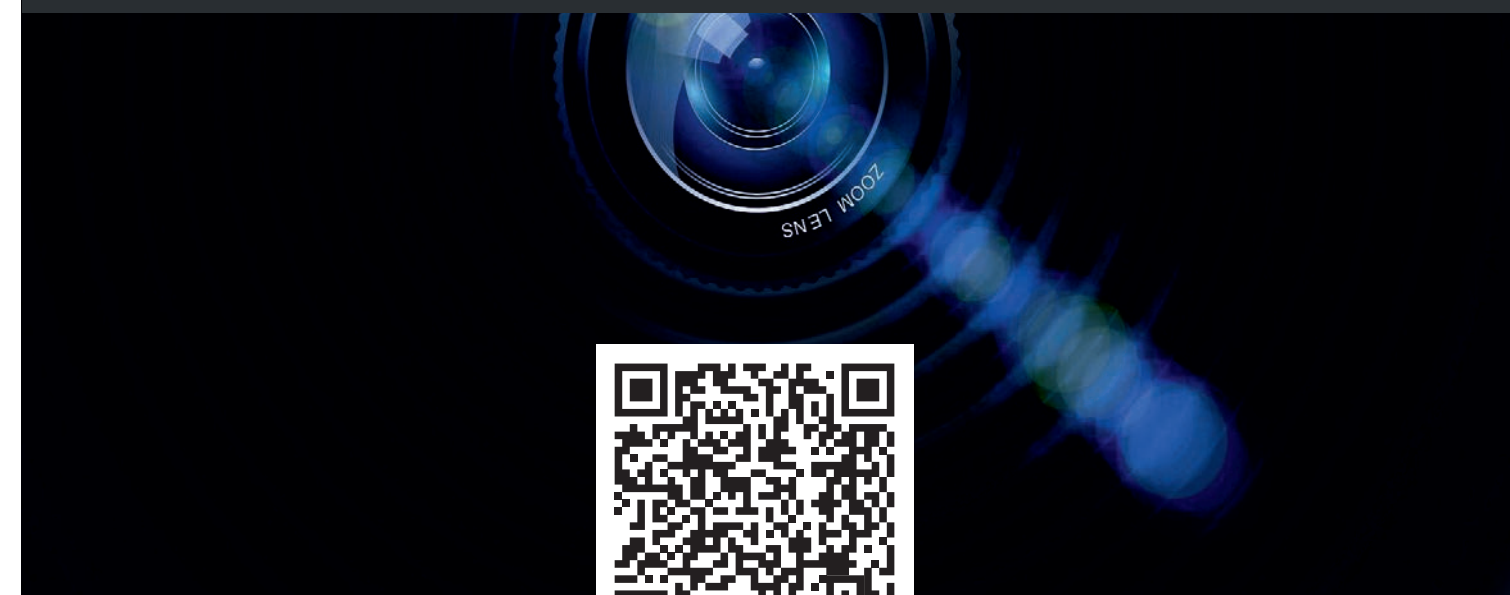
Once a cloud-account is registered (free of charge), test results, administrator settings, rules and reports can be managed online: <http://labcom.cloud>

With the built-in camera, the PrimeLab 2.0 gives the option to scan barcodes and QR-codes to identify Accounts (water-sites or locations) set up by the user and to identify reagents with barcode / QR-code on the package.

The advantages of this options are significant:

Scanning the barcode / QR-code of a water site ensures that you always connect the test results obtained to the right Account. rapidly reducing the test process as the related Account will be selected automatically, ready for the next measurement.

Scanning barcodes / QR codes from the reagent's package prevents from ever using wrong or even expired reagents, accelerating the test process by pre-selecting the parameter method, ready for the next measurement.



# 1-hour Legionella sp. Test

1-hour Legionella sp. test • Quantitative (60 - 10<sup>6</sup> cfu)

AOAC certified • Detection of viable cells • Patented method

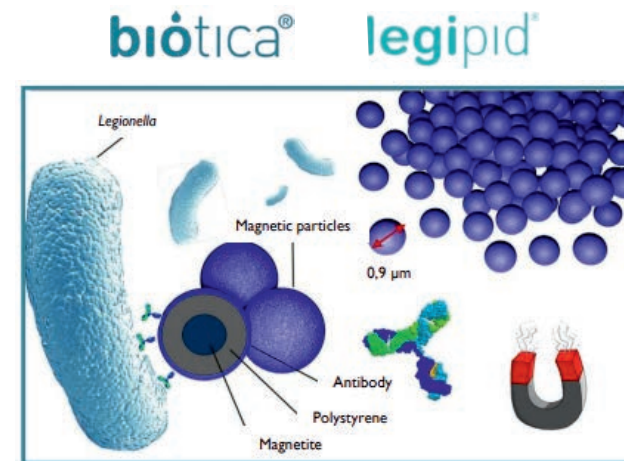
The LEGIPID 1-hour Legionella sp. test is one of the more than 140 different parameter-methods on the PrimeLab 2.0

Legionella bacteria, in special Legionella pneumophila serogroup 1, is a harmful threat with a mortality rate of up to 30%. Once Legionella is inhaled (droplets in the air), they grow in human lungs and can cause Pontiac fever or even Pneumonia (Legionnaire's disease). The issue with current method (culture) is that it takes up to 14 days to let Legionella grow on a petri dish to be viable and countable, which is far too long to take effective actions. Legipid® on PrimeLab takes a different approach:

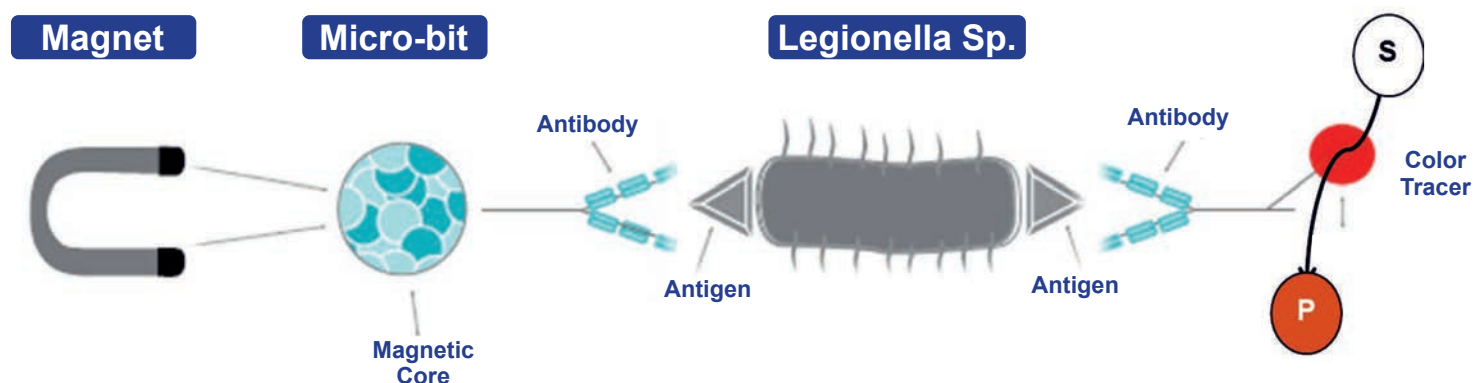
As with the culture method 1litre of water is filtered to catch the Legionella. After releasing Legionella from a filter, a patented reagent is added which contains micro-bits with a magnetic core, covered with an antibody. Due to the antibodies, only living Legionella Sp. (no false positives!) are captured. After several steps, a colour tracer, again connected to an antibody, is added to connect with Legionella Sp., already linked to the micro-bit.

This results in viable Legionella being made visible (pink colour) to be read by PrimeLab.

PrimeLab detects colour and translates it into the range: 60 - 10<sup>6</sup> cfu.



LEGIPID schematics



# Flexible Parameter Setup - Fairplay

Choose from more than 140 parameter-methods

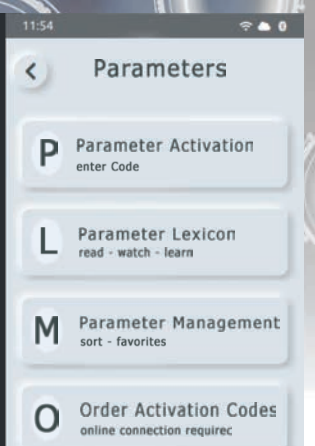
## Why pay for more parameters than needed?

As with PrimeLab 1.0, the PrimeLab 2.0 will offer a flexible parameter setup with all options to upgrade whenever needed.

The PrimeLab 2.0 offers more than 140 different parameter-methods, covering the needs of many different industries. It is rather unlikely that one user will be in need of all parameters offered.

That's why the PrimeLab practices fair play by giving the user the option to choose and pay only for those parameters they really need. This keeps the costs down to a minimum and makes the PrimeLab 2.0 even more convenient to use.

Even after purchase, the user has the option to activate additional parameters at any time by just ordering an activation code, to be entered on the PrimeLab 2.0 for instant activation.



## Steps

1

PrimeLab 2.0 Basic Kit in a carrying case with device, light-shield, vials, stirring rod, charger, cleaning brush, microfibrecloth, syringes and full printed user manual.

2

Choose those parameters/ methods from the parameter's list, which shall be pre-activated when PrimeLab 2.0 will be delivered.

3

Pick additional accessories, such as additional vials, pipettes, filter equipment plus reagents according to the parameters selected.

4

(optional) Order activation codes (at any time) for additional parameters, whenever required. Activate directly on the PrimeLab or through the LabCOM software/app.



Laboratories    Waste Water    Cooling Towers

Potable Water    Marine Industry    Food processing    Water Plants    Boiler Water

More than 140 different parameter-methods to choose from!

Over almost 2 decades, Water-i.d. developed reagents and Photometer-curves for more than 140 different parameter-methods. Just like the PrimeLab 1.0, the PrimeLab 2.0 offers water testing solutions for many different industries, testing almost every parameter from A for Alkalinity to Z for Zinc.

All PrimeLab 2.0 parameter-curves are calibrated to quality reagents, developed and produced in Germany and UK. Users can also define their own curves, using all 18 wavelengths, and store them on PrimeLab!

Code	Parameter	Range	Resolution
PLPar1	Active Oxygen	0 - 40 mg/l	0.1
PLPar5	Alkalinity-M	5 - 200 mg/l	1
PLPar121	Alkalinity-M (HR)	0 - 500 mg/l	1
PLPar6	Alkalinity-P	5 - 300 mg/l	1
PLPar4	Aluminium	0 - 0.3 mg/l	0.01
PLPar2	Ammonia (LR)	0 - 1 mg/l	0.01
PLPar155	Ammonia (HR)	1 - 50 mg/l	0.1
PLPar125	Acsamine 28F	0 - 100 mg/l	1
PLPar145	Acsamine CC	0 - 100 mg/l	1
PLPar146	Acsamine CCA	0 - 100 mg/l	1
PLPar126	Acsamine DW	0 - 100 mg/l	1
PLPar141	Acsamine DWBR1	0 - 100 mg/l	1
PLPar142	Acsamine DWC	0 - 100 mg/l	1
PLPar143	Acsamine SW	0 - 100 mg/l	1
PLPar144	Acsamine SWC	0 - 100 mg/l	1
PLPar7	Boron	0 - 2 mg/l	0.1
PLPar8	Bromine	0 - 18 mg/l	0.01
PLPar63	Bromine	0 - 18 mg/l	0.01
PLPar128	Bromine	0 - 4.5 mg/l	0.01
PLPar71	Carbohydrazide	0 - 1.3 mg/l	0.01
PLPar95	Chloramines	0.00 - 8.00 mg/l	0.01
PLPar10	Chloride	0.5 - 25 mg/l	0.1
PLPar124	Chloride	0 - 100 mg/l	0.1
PLPar167	Chloride in Methanol	0 - 20 mg/l	0.01
PLPar11	Chlorine (free-combined-total)	0.00 - 8.00 mg/l	0.01
PLPar12	Chlorine (free-combined-total)	0.00 - 8.00 mg/l	0.01
PLPar129	Chlorine (free)	0 - 2 mg/l	0.01
PLPar122	Chlorine (MR)	0.00 - 10.00 mg/l	0.01
PLPar14	Chlorine (HR)	5 - 200 mg/l	1

\*if parameter and range repeats, different reagents are used (e.g. liquid reagents instead of tablets)

Code	Parameter	Range	Resolution
PLPar15	Chlorine (HR)	0 - 200 mg/l	1
PLPar16	Chlorine Dioxide	0 - 15 mg/l	0.01
PLPar64	Chlorine Dioxide	0 - 15 mg/l	0.01
PLPar130	Chlorine Dioxide	0 - 5 mg/l	0.01
PLPar108	Total Oxidant	0 - 8 g/l	0.01
PLPar106	Chlorite	0 - 8 mg/l	0.01
PLPar94	Chromium	0 - 2.2 mg/l	0.01
PLPar103	Chromium	0 - 1 mg/l	0.01
PLPar79	COD (LR)	0 - 150 mg/l	1
PLPar80	COD (MR)	0 - 1500 mg/l	1
PLPar17	COD (HR)	0 - 15000 mg/l	1
PLPar107	Colour	15 - 500 mg/l	1
PLPar18	Copper	0 - 5 mg/l	0.01
PLPar19	Copper	0 - 5 mg/l	0.01
PLPar158	Cyanide	0.01 - 0.50 mg/l	0.01
PLPar20	Cyanuric Acid	2 - 160 mg/l	1
PLPar65	DBNPA	0 - 13 mg/l	0.01
PLPar82	DBNPA	0 - 13 mg/l	0.01
PLPar21	DEHA	20 - 1000 µl/l	10
PLPar163	Dissolved Oxygen	0 - 10 mg/l	0.1
PLPar70	Erythorbic Acid	0 - 3.5 mg/l	0.01
PLPar113	Fluorescein	0 - 500 µl/l	1
PLPar72	Fluoride	0 - 2 mg/l	0.01
PLPar78	Hardness-Calcium	0 - 500 mg/l	1
PLPar166	Hardness-Calcium	0 - 500 mg/l	1
PLPar9	Hardness-Calcium (HR)	50 - 1000 mg/l	1
PLPar56	Hardness-Total LR	2 - 50 mg/l	1
PLPar148	Hardness total (HR)	0 - 500 mg/l	1
PLPar57	Hardness-Total HR	20 - 500 mg/l	1
PLPar23	Hydrazine	5 - 600 µl/l	1
PLPar160	Hydrocarbons in Methanol (tank wash)	yes/no	1
PLPar66	Hydrogen Peroxide (LR)	0 - 3.8 mg/l	0,01
PLPar24	Hydrogen Peroxide (LR)	0 - 3.8 mg/l	0,01
PLPar25	Hydrogen Peroxide (HR)	0 - 200 mg/l	1
PLPar162	Hydrogen Peroxide (HR)	0 - 200 mg/l	1
PLPar109	DEWAN-50	0 - 300 mg/l	1
PLPar26	Hydroquinone	0 - 2.5 mg/l	0,01
PLPar27	Iodine	0 - 28 mg/l	0,01
PLPar67	Iodine	0 - 28 mg/l	0,01
PLPar28	Iron (LR)	0 - 1 mg/l	0,01

\*if parameter and range repeats, different reagents are used (e.g. liquid reagents instead of tablets)





Laboratories

Waste Water

Cooling Towers

Potable Water Marine Industry Food processing Water Plants Boiler Water

Code	Parameter	Range	Resolution
PLPar29	Iron (MR)	0 - 10 mg/l	0.01
PLPar127	Iron (MR) Ferrous	0 - 10 mg/l	0.01
PLPar30	Iron (HR)	0 - 30 mg/l	0.01
PLPar132	Iron total	0 - 3 mg/l	0.01
PLPar149	Iron in Oil	50 - 500 mg/l	1
PLPar88	Isothiazolinone	0.0 - 10.0 mg/l	0.01
PLPar147	Legionella	60 -10 <sup>6</sup> cfu	1
PLPar93	Magnesium	0 - 100 mg/l	1
PLPar161	Manganese VLR	0 - 0.030 mg/l	0
PLPar31	Manganese	0.2 - 5 mg/l	0.1
PLPar69	Methylethylketoxime	0 - 4.1 mg/l	0.01
PLPar96	Molybdate (LR)	0 - 15 mg/l	0.01
PLPar33	Molybdate (HR)	5 - 200 mg/l	0.1
PLPar32	Molybdate	1 - 100 mg/l	0.1
PLPar134	Molybdate (HR)	0 - 4 mg/l	0.1
PLPar90	Nickel (HR)	0 - 7 mg/l	0.1
PLPar100	Nickel (HR)	0 - 10 mg/l	0.1
PLPar34	Nitrate	0.00 - 11.00 mg/l	0.1
PLPar169	Nitrate (HR)	1 - 100 mg/l	1
PLPar35	Nitrite (LR)	0 - 0.5 mg/l	0.01
PLPar36	Nitrite (HR)	5 - 200 mg/l	0.1
PLPar97	Nitrite (HR)	0 - 1500 mg/l	1
PLPar101	Nitrite (HR)	0 - 3000 mg/l	1
PLPar151	Nitrogen-Total (LR)	0.5 - 25 mg/l	0.1
PLPar152	Nitrogen-Total (HR)	5 - 150 mg/l	1
PLPar37	Ozone	0 -5.4 mg/l	0.01
PLPar92	Ozone	0 -5.4 mg/l	0.1
PLPar164	Peracetic Acid (LR)	0.00 - 10.00 mg/l	0.01
PLPar165	Peracetic Acid (HR)	0 - 300 mg/l	1
PLPar159	Permanganate Time Test in Methanol (tank wash)	0-100 %A	0.1
PLPar40	pH-value (LR)	5.2 - 6.8 pH	0.01
PLPar38	pH-value (MR)	6.5 - 8.4 pH	0.01
PLPar39	pH-value (MR)	6.5 - 8.4 pH	0.01
PLPar41	pH-Universal	5 - 11 pH	0.1
PLPar42	pH-Universal	4 - 11 pH	0.1
PLPar98	Phenol	0 - 5 mg/l	0.01
PLPar43	PHMB	2 - 60 mg/l	1
PLPar44	Phosphate-ortho (LR)	0 - 4 mg/l	0.01
PLPar45	Phosohate-ortho (LR)	0 - 4 mg/l	0.01

\*If parameter and range repeats, different reagents are used (e.g. liquid reagents instead of tablets)

Code	Parameter	Range	Resolution
PLPar46	Phosphate-ortho (HR)	0 - 80 mg/l	0.1
PLPar47	Phosphate-ortho (HR)	0 - 100 mg/l	0.1
PLPar87	Phosphonate	0 - 20 mg/l	0.01
PLPar110	Phosphonate	0 - 20 mg/l	0.01
PLPar153	Phosphorus-Total (LR)	0 - 2.6 mg/l	0.01
PLPar154	Phosphorus-Total (HR)	0 - 52 mg/l	0.1
PLPar85	Polyacrylate	1 - 30 mg/l	0.1
PLPar48	Potassium	0.7 - 12 mg/l	0.1
PLPar111	PTSA	0 - 1000 µl/l	1
PLPar157	PTSA Tracer	0 - 1000 µl/l	1
PLPar156	PTSA Watch Products	0 - 1000 µl/l	1
PLPar83	QAC	25 - 150 mg/l	1
PLPar49	Silica (LR)	0 - 5 mg/l	0.01
PLPar50	Silica (HR)	0 - 100 mg/l	1
PLPar51	Sodium Hypochlorite	0.2 - 40 %	0.1
PLPar68	Sodium Hypochlorite	0.2 - 40 %	0.1
PLPar54	Sulphate	5 - 100 mg/l	1
PLPar55	Sulphate	5 - 100 mg/l	1
PLPar52	Sulphide	0.0 - 0.5 mg/l	0.01
PLPar140	Suphide	0 - 0.7 mg/l	0.01
PLPar53	Sulphite (LR)	0 - 10 mg/l	0.1
PLPar105	Sulphite (HR)	0 - 300 mg/l	0.1
PLPar81	Suspended solids	10 - 750 mg/l	1
PLPar91	Tannic acid	0 - 150 mg/l	0.1
PLPar114	Transmission on 420nm	0 - 100 %	0.1
PLPar115	Transmission on 470nm	0 - 100 %	0.1
PLPar116	Transmission on 520nm	0 - 100 %	0.1
PLPar117	Transmission on 570nm	0 - 100 %	0.1
PLPar118	Transmission on 620nm	0 - 100 %	0.1
PLPar119	Transmission on 670nm	0 - 100 %	0.1
PLPar59	Turbidity (FAU)	20 - 1000 FAU	1
PLPar112	Turbidity (NTU)	0 - 1100 NTU	0.01
PLPar120	Urea	0.1 - 2.5 mg/l	0.1
PLPar150	Urea	0.2 - 5.0 mg/l	0.2
PLPar62	Zinc	0 - 1 mg/l	0.01

\*If parameter and range repeats, different reagents are used (e.g. liquid reagents instead of tablets)

PRIME LAB 2.0 Accessories

Although the PrimeLab 2.0 Basic-Kit already contains most of the accessories needed, depending on the parameter-methods chosen, additional equipment may be needed, such as professional lab-pipettes, filter equipment or additional vials.



Item code	Item description
<b>Vials and measuring cups</b>	
PLSp-Kv2410-10	Set of 10 x 24mm (10ml) round glass vials with lid / light shield integrated in lid
PLSp-Kv1610-10	Set of 10 x 16mm (10ml) round glass vials with lid
PLSp-Kv1-100	Set of 100 x 1ml Eppendorf-vials
PLSp-LG-ELF10	Set of 10 x 60ml measuring cup with red lid
SVZdev100	100ml plastic measuring cup
PLSp-GlsBot50ml	50ml glass-bottle with stopper
<b>Dosing equipment</b>	
PLSp-inj1	Graduated Plastic Syringe (10ml)
PLSp-inj03	Graduated Plastic Syringe (3ml)
PLSp-inj01	Graduated Plastic Syringe (1ml)
PLSp-PIP10ml	10 ml pipette (variable volume 1-10ml)
PLSp-PIP10ml-tips10	10 x tips for PLSp-PIP10ml pipette
PLSp-PIP1ml	1 ml pipette (variable volume 0.1-1ml)
PLSp-PIP1ml-tips10	10 x tips for PLSp-PIP1ml pipette
PLSp-PIP01ml	0.1 ml pipette (variable volume 0.01-0.1ml)
PLSp-PIP01ml-tips10	10 x tips for PLSp-PIP01ml pipette
<b>Filter utilities</b>	
PLSp-InjFil-1	Luer lock syringe (20ml) with threat for filter holder
PLSp-Filtad1	filter holder for PLSp-InjFil-1 luer lock syringe
PLSp-FiltGFC	25mm GF/C Filter. Bottle of 50 filter papers
PLSp-Filt45M	25mm 0.45 µm filter. Bottle of 50 filter papers

<b>Stirring rods / cleaning brushes</b>	
SPstr10	Set of 10 x 13 cm plastic stirring rods
PLSp-str10	Set of 10 x 10.5 cm plastic stirring rods
SPcb10	Set of 10 x 9.5 cm vial-cleaning brushes

<b>Electronics</b>	
PLSp-CODheatblock-E	Heat block for 8 x 16mm vials. Temp. 70, 100, 120, 150 and 160°C. Digital reading, 220 - 240 V / 50 - 60 Hz and 110 - 130 V / 50 – 60 Hz, 140W
PLSp-CODheatblock-L	Single block thermostat for 12 x 16mm vials. Temperature up to 150°C. Digital reading. 230V, 50/60 Hz. <i>Bluetooth®</i> USB dongle (to enable <i>Bluetooth®</i> on any Windows-PC)
PLSp-BltID-1	GSM-modem (USB-Type-C)
PLSp2-GSM	USB-connector (type A to type C)
PLSp2-USBA-c	USB-Hub (Type C and Type A)
PLSp2-USBhuba	USB-cable (Type A on one end / type C at the other end)
PLSp2-USBcable	PrimeLab 2.0 charger with EU plus
PLSp2-chargeEU	UK/AUS/US plug for PrimeLab 2.0 charger
PLSp2-UK/AUS/US	

<b>Other Accessories</b>	
PLSp2-Ad16/Ad1	PrimeLab 2.0 vial adapter for 16mm glass vials / 1ml Eppendorf vials
PLSp-mft-1	Micro fiber cloth 13x13 cm for PrimeLab vials
PLSp2-carr2	Large PrimeLab 2.0 plastic carrying case
PLSp2-Alucase	Aluminium trolley with foam inserts for PrimeLab 2.0 plus accessories

<b>Reference standards</b>	
PL2Sp-Ref112038-f	Reference standard kit for PrimeLab IDs 11 (chlorine by tablet), ID 20 (cyanuric acid) and ID 38 (pH by tablet).2 standards for ID 11 (~0.5 mg/l and ~2 mg/l), 1 standard for ID 20 (~80 mg/l), 1 standard for ID 38 (~7.00 pH) as well as a ZERO vial. In a box with description. 1 year shelf life.
PL2Sp-Ref122039-f	Reference standard kit for PrimeLab IDs 12 (chlorine by liquid), ID 20 (cyanuric acid) and ID 39 (pH by liquid). 2 standards for ID 12 (~0.5 mg/l and ~2 mg/l), 1 standard for ID 20 (~80 mg/l), 1 standard for ID 39 (~7.00 pH) as well as a ZERO vial. In a box with description. 1 year shelf life.
PL2Sp-RefPTSA	2 x 100ml reference standards 500 µg/l PTSA, deionized water
PL2Sp-RefFLSC	2 x 100ml reference standards 100 µg/l Fluorescein, deionized water
PL2Sp-RefTRB	3 x 10ml reference standards 0.5 NTU, 10 NTU, 1000

<b>Electrodes / Probes</b>	
PL2Sp-IH40ATC	pH-Electrode Sealed gel electrode for samples with low contamination levels and reasonable ionic strength. BNC-connector, cable length = 1 meter.
PL2Sp-IH40ATC-ALK	pH-Electrode ("Low Sodium Error" version). Sealed gel electrode for samples with low contamination levels and reasonable ionic strength. BNC-connector, cable length = 1 meter.
PL2Sp-IJ44A	pH-Electrode for solids: Soils, creams, emulsions, foods. BNC-connector, cable length = 1 meter.
PL2Sp-IJ44A/ATC	pH-Electrode for solids: Soils, creams, emulsions, foods. BNC-connector, cable length = 1 meter.

Ask for our large variety of check-standards (coloured epoxy raisin) in sealed 24mm glass vials  
Legipid (1 hour Legionella test) requires special equipment, which is not listed on this page

<b>Item code</b>	<b>Item description</b>
PL2Sp-IH30	ORP-Electrode. Sealed gel electrode for samples with low contamination levels and
reasonable	
.PL2Sp-IH30D	ionic strength. BNC-connector, cable length = 1 meter.
PL2Sp-EC1T	ORP-Electrode with Pt-disc for faster response. BNC-connector, cable length = 1 meter.
	EC-Electrode (2-pole). BNC-connector, cable length = 1 meter. ATC

<b>Probe-Accessories</b>	
PL2Sp-ElBox	PrimeLab 2.0 Electrode-Connector (A/D switch)
<b>Other</b>	
PL2Sp-Probe-Holder	PrimeLab 2.0 Electrode-Holder
PL2Sp-Probe-Stirrer	PrimeLab 2.0 magnetic-stirrer

<b>Calibration / Reference Standards</b>	
various	ask for our full list of calibration standards
<b>Kits</b>	
PL2Sp-ElePHkit	

	PrimeLab 2.0 Electrode-Basic-Kit "pH / Temp.": grey carrying case with foam insert 1 x "PL2Sp-IH40ATC" pH-Electrode. Sealed gel electrode for samples with low contamination levels and reasonable ionic strength. BNC-connector, cable length = 1 meter. Measuring range: 0.00 - 14.00 pH, resolution: 0.01 pH; Temperature-range: 0 - 60°C. ATC 1 x "PL2Sp-ElBox" A/D-switch-box with BNC-IN and USB-Type-C-OUT to connect with PrimeLab 2.0 Photometer 1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl- electrode soaking solution 1 x "EMphbuf700-20" 20 ml "pH 7.00" calibration solution 1 x "EMphbuf400-20" 20 ml "pH 4.00" calibration solution 1 x "EMphbuf1000-20" 20 ml "pH 10.00" calibration solution User manual
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PL2Sp-ElePHlowSodKit	PrimeLab 2.0 Electrode-Basic-Kit "pH (low sodium error)":grey carrying case with foam insert 1 x "PL2Sp-IH40ATC-ALK" pH-Electrode ("Low Sodium Error" version). Sealed gel electrode for samples with low contamination levels and reasonable ionic strength. BNC-connector, cable length = 1 meter. Measuring range: 0.00 - 14.00 pH, resolution: 0.01 pH 1 x "PL2Sp-ElBox" A/D-switch-box with BNC-IN and USB-Type-C-OUT to connect with PrimeLab 2.0 Photometer 1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl-electrode soaking solution 1 x "EMphbuf700-20" 20 ml "pH 7.00" calibration solution 1 x "EMphbuf400-20" 20 ml "pH 4.00" calibration solution 1 x "EMphbuf1000-20" 20 ml "pH 10.00" calibration solution User manual
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PL2Sp-ElePHsolids	PrimeLab 2.0 Electrode-Basic-Kit "pH (solids)":grey carrying case with foam insert 1 x "PL2Sp-IJ44A" pH-Electrode for solids: Soils, creams, emulsions, foods. BNC-connector, cable length = 1 meter Measuring range: 0.00 - 14.00 pH, resolution: 0.01 pH 1 x "PL2Sp-ElBox" A/D-switch-box with BNC-IN and USB-Type-C-OUT to connect with PrimeLab 2.0 Photometer 1 x bottle with reference electrolyte User manual 1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl-electrode soaking solution 1 x "EMphbuf700-20" 20 ml "pH 7.00" calibration solution 1 x "EMphbuf400-20" 20 ml "pH 4.00" calibration solution 1 x "EMphbuf1000-20" 20 ml "pH 10.00" calibration solution PrimeLab 2.0 Electrode-Basic-Kit "pH (solids) + Temp. (ATC)": grey carrying case with foam insert 1 x "PL2SP-IJ44A/ATC " pH-Electrode for solids: Soils, creams, emulsions, foods. BNC-connector, cable length = 1 meter. With Temperature-reading and ATC. Measuring range: 0.00 - 14.00 pH, resolution: 0.01 pH 1 x "PL2Sp-ElBox" A/D-switch-box with BNC-IN and USB-Type-C-OUT to connect with PrimeLab 2.0 Photometer 1 x bottle with reference electrolyte User manual 1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl-electrode soaking solution 1 x "EMphbuf700-20" 20 ml "pH 7.00" calibration solution 1 x "EMphbuf400-20" 20 ml "pH 4.00" calibration solution 1 x "EMphbuf1000-20" 20 ml "pH 10.00" calibration solution
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PL2SP-EleORPkit	PrimeLab 2.0 Electrode-Basic-Kit "ORP":grey carrying case with foam insert 1 x "PL2Sp-IH30" ORP-Electrode. Sealed gel electrode for samples with low contamination levels and reasonable ionic strength. BNC-connector, cable length = 1 meter. Measuring range: +/- 1,000mV, resolution: 1mV 1 x "PL2Sp-ElBox" A/D-switch-box with BNC-IN and USB-Type-C-OUT to connect with PrimeLab 2.0 Photometer 1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl-electrode soaking solution 1 x "EMorpbuf220-20" 20 ml "ORP +220mV" calibration solution 1 x "EMorpbuf468-20" 20 ml "ORP +468mV" calibration solution User manual
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PL2SP-EleORPptdisckit	PrimeLab 2.0 Electrode-Basic-Kit "ORP / Pt-disc for faster response": grey carrying case with foam insert 1 x "PL2Sp-IH30" ORP-Electrode with Pt-disc for faster response. BNC-connector, cable length = 1 meter. Measuring range: +/- 1,000mV, resolution: 1mV 1 x "PL2Sp-ElBox" A/D-switch-box with BNC-IN and USB-Type-C-OUT to connect with PrimeLab 2.0 Photometer 1 x "EMorpbuf220-20" 20 ml "ORP +220mV" calibration solution 1 x "EMorpbuf468-20" 20 ml "ORP +468mV" calibration solution User manual
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PL2SP-EleEckit	PrimeLab 2.0 Electrode-Basic-Kit "EC-TDS-Salz / Temp.": grey carrying case with foam insert 1 x "PL2Sp-EC1T" EC-Electrode (2-pole). BNC-connector, cable length = 1 meter. ATC Measuring range / resolution: EC: 0 - 2000 µS/cm (1 µS/cm), 2 - 500 mS/cm (1 mS/cm) TDS: 0 - 2000 mg/l (1 mg/l), 2 - 325 g/l (1 g/l) Salt: 0 - 1000 mg/l (1 mg/l), 1.00 - 300 g/l (1 g/l) Temperature: 0 - 90°C (1°C) 1 x "PL2Sp-ElBox" A/D-switch-box with BNC-IN and USB-Type-C-OUT to connect with PrimeLab 2.0 Photometer 1 x "EMecbuf1413-20" 20 ml "1413 µS/cm" calibration solution 1 x "EMecbuf1288-20" 20 ml "12.88 mS/cm" calibration solution User manual
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PL02B-TRB	PrimeLab 2.0: Starter-Kit WITH Turbidity (NTU) (without reagents) 1 x grey plastic carrying-case with foam insert 1 x PrimeLab 2.0 Multitest Photometer 4 x 24mm/10ml glass-vials with lid (light-shield incorporated into the lid) 1 x light shield (for 16mm and 1ml vials as well as check-standards) 1 x 24mm vial adapter (built-in; exchangeable) 1 x 10.5 cm stirring rod 1 x 10ml plastic syringe (graduated) 1 x 1 - 10ml professional lab pipette with 2 tips 1 x NTU-Turbidity calibration kit. Sealed glass vials with 0.5 / 10 / 1000 NTU
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	1 x vial cleaning brush 1 x microfibre cleaning cloth for vials 1 x Bluetooth USB dongle 1 x charger with cable (USB-Type-C) 1 x printed user manual in a ring-binder
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PL02BALL	PrimeLab 2.0: starter-kit / ALL parameters activated (without reagents) 1 x grey plastic carrying-case with foam insert 1 x PrimeLab 2.0 Multitest Photometer 5.5" <i>HD-Colour-Touch Display</i> 16 <i>wavelengths-scan (410 - 940nm)</i> "90" <i>ready" for NTU, PTSA, Fluorescein, Plankton</i> <i>Option of over 140 different parameters (chargeable activation required)</i> 8.400 <i>mAh Li-Ion-battery (built-in)</i> <i>Bluetooth 4.2</i> <i>WiFi</i> <i>USB Type C</i> <i>GSM (via USB-Type-C Modem)</i> <i>Option to connect Electrodes (via USB Type C plus A/D-changer-Box)</i> <i>built-in camera to scan QR-Codes</i> <i>Self-Calibration-Mode with certificate (via LabCOM software)</i> <i>"I-OTZ" Intelligent-One-Time-Zero</i> <i>compatible to the free of charge PrimeLab tools: LabCOM App/Software/Cloud (Android, iOS, Windows, Mac, Browser)</i>
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	10 x 24mm/10ml glass-vials with lid (light-shield incorporated into the lid) 1 x light shield (for 16mm and 1ml vials as well as check-standards) 1 x 24mm vial adapter (built-in; exchangeable) 1 x 16mm vial adapter 1 x 1ml Eppendorf-vial adapter 2 x 10,5 cm stirring rod 1 x 10ml syringe 1 x cleaning brush for vials 1 x microfibre cleaning cloth for vials 1 x Bluetooth USB dongle 1 x charger with cable (USB-Type-C) 1 x Luer lock syringe (20ml) with adapter for filter holder 1 x Filteradapter for 20ml Luer-Lock-Spritze 1 x can with 50 Filterpapieren GF/C (25mm) 1 x can with 50 Filterpapieren 0.4µ (25mm) 1 x 100ml can with Deckel (for dilution)
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Technical Data



Item code	Item description
<b>PrimeLab 2.0 Basic Kit</b>	
PL02B	PrimeLab 2.0 Basic Kit in plastic carrying case with foam insert. 1 x PrimeLab 2.0 Multitest Photometer 4 x 24mm/10ml glass vials with lid (light shield integrated in lid) 1 x light shield for 16mm vials, Eppendorf vials and calibration 1 x 24mm vial adapter (built-in; exchangeable) 1 x 10.5 cm plastic stirring rod 1 x graduated 10ml plastic syringe 1 x vial cleaning brush 1 x Battery-Charger with USB-cable (type C)

<b>Dimensions:</b>	10cm x 25.5cm x 5.9cm (width x length x depth)
<b>Weight:</b>	715g
<b>Spectral range:</b>	390nm - 950nm 18 wavelength, peaks at 410/435/460/485/510/535/560/585/610/645/680/705/730/760/810/860/900/940nm 180° and 90° Setup for direct and indirect measurement

<b>Parameters:</b>	more than 140 parameters (flexible setup) User defined parameter function
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<b>Electrodes:</b>	USB-type-C connector for pH/EC/TDS/ORP/Temp-Probes
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<b>Connectivity:</b> (technical)	<i>Bluetooth®</i> 4.2 WiFi USB (type C) GSM (via USB-modem)
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<b>Connectivity:</b> (software)	LabCOM software (Windows / Mac) LabCOM App (Android / iOS) LabCOM Cloud (web-browser)
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<b>Display:</b>	5.5" Color-HD-Touch Display
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<b>Camera:</b>	In-built barcode / QR-code scanner
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<b>Calibration:</b>	Auto-calibration function with certificate (software)
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<b>One-Time-Zero:</b>	Intelligent OTZ (One-Time-Zero) function with recognition of ZERO types
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<b>Internal memory:</b>	>5,000
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<b>Clock/Date:</b>	RTC (Real-Time-Clock) with calendar function
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<b>Auto-Off:</b>	Factory default setting = 10 minutes. Individual adjustment possible
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<b>Menu guidance:</b>	Intuitive, display-controlled 4-button menu guidance; test instructions during measurement process
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<b>Power supply:</b>	8,500 mA Li-Io-battery
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<b>Languages:</b>	> 15
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<b>Environment:</b>	5°C - 45°C / 30 - 90% rel. humidity
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<b>Water-proof rating:</b>	The device is splash-water-proof (IP <b>ausfüllen</b> )
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<b>Reagents:</b>	The calibration curves for the individual parameters / measurement procedures are adjusted to the reagents offered by Water-i.d. Using reagents from other manufacturers may lead to wrong readings / higher tolerances PrimeLab reagents are etirely “Made in Germany” or “Made in UK”!
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The PrimeLab 2.0 hardware-development and design, the firmware, software, app and cloud-solution, along with all calibration curves (parameters) and reagents are entirely Made in Germany.

# PRIME LAB

## 2.0

### Headquarters and Production

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We will be pleased to send you  
contact details of our distribution  
network around the globe.

