

# PRIME LAI 2.0

THE ULTIMATE PHOTOMETER





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### 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-4G\* 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.

### Features

### More Than 140 Parameters



# 18 wavelengths sensor technology

UV - VIS - IR peaks at:

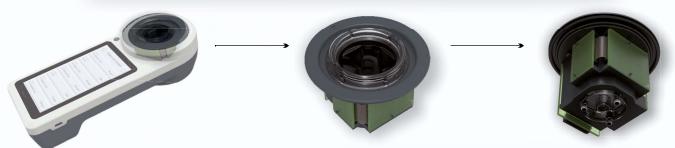
410nm	435nm	460nm	485nm	510nm	535nm
560nm	585nm	610nm	645nm	680nm	705nm
730nm	760nm	810nm	860nm	900nm	940nm

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

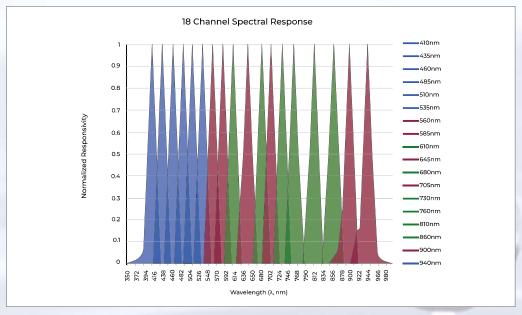
3 sensors with 6 wavelengths each are connected to each other Correspondent LEDs are set up at 180° as well as at 90° to enable NTU-Turbidity, PTSA and Fluorescein measurements as well.

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 can interpolate between the different wavelength readings, while the parameter curves are set 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" Colour-HD-Touch Display





The PrimeLab 2.0 homescreen



Managing Accounts (water sites)



Scan QR codes (water sites or reagents)



Choose from many different languages



Step by Step instructions with animations

# 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 4G\* connectivity and offers highest flexibility for you to arrange icons as you would on your smartphone.

Each and every parametermethod 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.

# 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 2.0 utilises 24mm glass vials, 16mm glass vials and 1ml (3mm) Eppendorf vials. The vial adapter can easily be changed and replaced with a simple, built in, bayonet lock.



24mm vial adapter (standard)



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



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

# Connecting PRIMELAB 2.0

USB - WiFi - Bluetooth - 4G\*

### Over time, water testing became much more than just about testing.

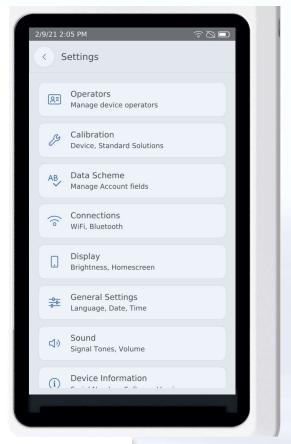
Real-time availability of reliable test results plus data management are as important as the test results itself. The PrimeLab 2.0 is the ultimate for connectivity!

Bluetooth, WiFi, USB (Type C) and 4G\* 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.





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\*via USB Internet Stick / accessories / may be subject to costs for connection

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# LabCom App - Software - Cloud

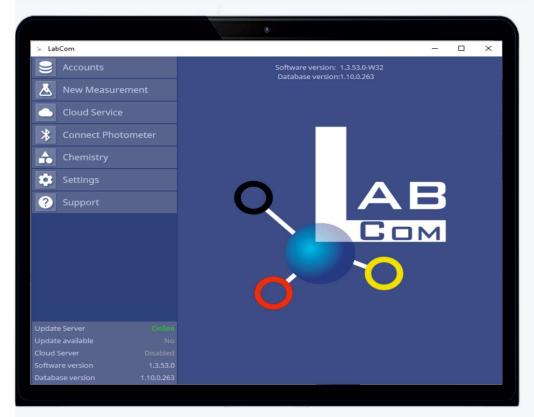


The most powerful LabCOM App / Software / Cloud-solution, developed over many years and in use with the PrimeLab 1.0 along with the PoolLab, also connects and runs with the PrimeLab 2.0.

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



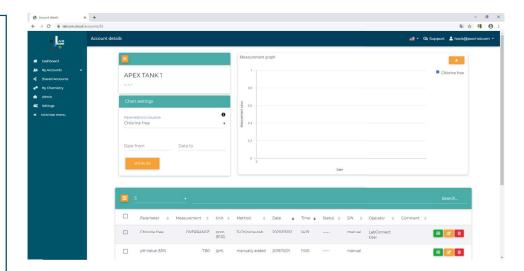
# LABCOM

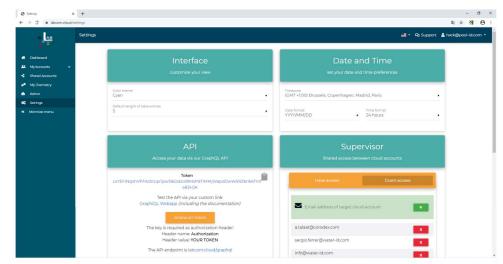
# Cloud



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

### PRIMELAB 2.0 Camera

Built In

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.



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# 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 pneumorphila 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).

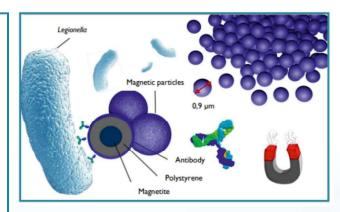
The issue with current method (culture) is that it takes up to 14 days to let Legionella grow on a petri dish to be viable and countable, which is far too long to take effective actions. Legipid® on PrimeLab takes a different approach:

As with the culture method 1 litre 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.

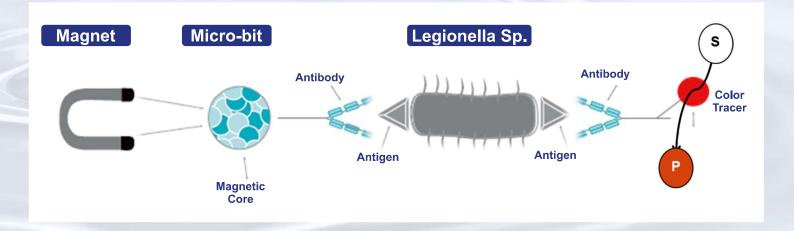
PrimeLab detects colour and translates it into the range:  $60 - 10^6$  cfu.



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

PrimeLab 2.0 Basic Kit in a carrying case with device, lightshield, vials stirring rod, charger, cleaning brush, microfibre cloth, syringes and full printed user manual.

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

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

(optional)

Order activation codes (at any time) for additional parameters, whenever required. Activate directly on the PrimeLab 2.0 or through the LabCOM Software / Арр.

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### More than 140 different parameter or methods to choose from!

Over almost two 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 2.0!

Code	Parameter	Range	Resolution
PLParl	Active Oxygen	0 - 40 mg/l	0.1
PLPar5	Alkalinity-M	5 - 200 mg/l	7
PLParl21	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
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
PLParl24	Chloride	0 - 100 mg/l	0.1
PLPar167	Chloride in Methanol	0 - 20 mg/l	0.01
PLParll	Chlorine (free-combined-total)	0.00 - 8.00 mg/l	0.01
PLParl2	Chlorine (free-combined-total)	0.00 - 8.00 mg/l	0.01
PLParl29	Chlorine (free)	0 - 2 mg/l	0.01
PLPar122	Chlorine (MR)	0.00 - 10.00 mg/l	0.01
PLParl4	Chlorine (HR)	5 - 200 mg/l	1

Marine Industry

Code	Parameter	Range	Resolution
PLParl5	Chlorine (HR)	0 - 200 mg/l	1
PLParl6	Chlorine Dioxide	0 - 15 mg/l	0.01
PLPar64	Chlorine Dioxide	0 - 15 mg/l	0.01
PLParl30	Chlorine Dioxide	0 - 5 mg/l	0.01
PLParl08	Total Oxidant	0 - 8 g/l	0.01
PLParl06	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	7
PLPar18	Copper	0 - 5 mg/l	0.01
PLParl9	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
PLParl13	Fluorescein	0 - 500 μΙ/Ι	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	i
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	i
PLPar109	DEWAN-50	0 - 300 mg/l	1
PLPar26	Hydroquinone	0 - 2.5 mg/l	0,01
PLPar27	lodine	0 - 28 mg/l	0,01
PLPar67	lodine	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)

Code	Parameter	Range F	Resolution
PLPar29	Iron (MR)	0 - 10 mg/l	0.01
PLParl27	Iron (MR) Ferrous	0 - 10 mg/l	0.01
PLPar30	Iron (HR)	0 - 30 mg/l	0.01
PLParl32	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
PLParl47	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
PLParl34	Molybdate (HR)	0 - 4 mg/l	0.1
PLPar90	Nickel (HR)	0 - 7 mg/l	0.1
PLParl00	Nickel (HR)	0 - 10 mg/l	0.1
PLPar34	Nitrate	0.00 - 11.00 mg	g/I 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	7
PLPar101	Nitrite (HR)	0 - 3000 mg/l	7
PLPar151	Nitrogen-Total (LR)	0.5 - 25 mg/l	0.1
PLPar152	Nitrogen-Total (HR)	5 - 150 mg/l	7
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	g/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	7
PLPar44	Phosphate-ortho (LR)	0 - 4 mg/l	0.01
PLPar45	Phosohate-ortho (LR)	0 - 4 mg/l	0.01

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

### PRIMELAB 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 labpipettes, filter equipment or additional vials.

Accessories		Electrodes	
Item code Vials and measuring cups	Item description	Item code PL2Sp-IH30	Item description ORP-Electrode.
PLSp-Kv2410-10 PLSp-Kv1610-10	Set of 10 x 24mm (10ml) round glass vials with lid / light shield integrated in lid Set of 10 x 16mm (10ml) round glass vials with lid		Sealed gel electrode for samples with low contamination levels and reasonable ionic strength. 8 pin plug, cable length = 1 meter.
PLSp-Kv1-100	Set of 100 x 1ml Eppendorf-vials	.PL2Sp-IH30D	ORP-Electrode with Pt-disc for faster response.  8 pin plug, cable length = 1 meter.
PLSp-LG-ELF10 SVZdev100	Set of 10 x 60ml measuring cup with red lid 100ml plastic measuring cup	PL2Sp-EC1T	EC-Electrode (2-pole).
PLSp-GlsBot50ml	50ml glass-bottle with stopper		8 pin plug, cable length = 1 meter. ATC
Dosing equipment PLSp-inj1	Graduated Plastic Syringe (10ml)	Probe-Accessories	
PLSp-inj03	Graduated Plastic Syringe (3ml)	PL2Sp-EIBox Other	PrimeLab 2.0 Electrode-Connector (A/D switch)
PLSp-inj01	Graduated Plastic Syringe (1ml)	PL2Sp-Probe-Holder	PrimeLab 2.0 Electrode-Holder
PLSp-PIP10ml PLSp-PIP10ml-tips10	10 ml pipette (variable volume 1-10ml) 10 x tips for PLSp-PIP10ml pipette	PL2Sp-Probe-Stirrer	PrimeLab 2.0 magnetic-stirrer
PLSp-PIP1ml	1 ml pipette (variable volume 0.1-1ml)	Calibration / Reference St	andards
PLSp-PIP1ml-tips10 PLSp-PIP01ml	10 x tips for PLSp-PIP1ml pipette 0.1 ml pipette (variable volume 0.01-0.1ml)	various	ask for our full list of calibration standards
PLSp-PIP01ml-tips10	10 x tips for PLSp-PIP01ml pipette	Kits	
Filter utilities PLSp-InjFil-1	Luer lock syringe (20ml) with threat for filter holder	PL2SP-ElePHkit	PrimeLab 2.0 Electrode-Basic-Kit "pH / Temp.": grey carrying case with
PLSp-Filtad1	filter holder for PLSp-InjFil-1 luer lock syringe		foam insert 1 x "PL2Sp-IH40ATC" pH-Electrode. Sealed gel electrode for samples with low contamination levels and reasonable ionic strength.
PLSp-FiltGFC PLSp-Filt45M	25mm GF/C Filter. Bottle of 50 filter papers 25mm 0.45 µm filter. Bottle of 50 filter papers		8 pin plug, cable length = 1 meter. Measuring range: 0.00 - 14.00
Stirring rods / cleaning bru	shes		pH, resolution: 0.01 pH; Temperature-range: 0 - 60°C. ATC 1 x "PL2Sp- ElBox" A/D-switch-box with 8 pin plug-IN and USB-Type-C-OUT to connec
SPstr10 PLSp-str10	Set of 10 x 13 cm plastic stirring rods Set of 10 x 10.5 cm plastic stirring rods		with PrimeLab 2.0 Photometer 1 x "PL2Sp-KCl3mol-10" dropper bottle wit
SPclb10	Set of 10 x 9.5 cm vial-cleaning brushes		10ml KCI- electrode soaking solution 1 x "EMphbuf700-20" 20 ml "pH 7.00 calibration solution 1 x "EMphbuf400-20" 20 ml "pH 4.00" calibration
Electronics PLSp-CODheatblock-E	Heat block for 8 x 16mm vials. Temp. 70, 100, 120, 150 and		solution 1 x "EMphbuf1000-20" 20 ml "pH 10.00" calibration solution
	160°C. Digital reading,		User manual
PLSp-CODheatblock-L	220 - 240 V / 50 - 60 Hz and 110 - 130 V / 50 – 60 Hz, 140W Single block thermostat for 12 x 16mm vials. Temperature up	PL2SP-ElePHlowSodKit	PrimeLab 2.0 Electrode-Basic-Kit "pH (low sodium error)":grey carrying
. 100 000 1100 1100 1100 1100 1100 1100	to 150°C.		case with foam insert 1 x "PL2Sp-IH40ATC-ALK" pH-Electrode ("Low Sodium Error" version).
PLSp-BltD-1	Digital reading. 230V, 50/60 Hz.  Bluetooth® USB dongle (to enable Bluetooth® on any Windows-PC)		Sealed gel electrode for samples with low contamination levels and
PLSp2-GSM	4G*-modem (USB-Type-C)		reasonable ionic strength. 8 pin plug, cable length = 1 meter.  Measuring range: 0.00 - 14.00 pH, resolution: 0.01 pH
PLSp2-USBa-c PLSp2-USBhuba	USB-connector (type A to type C) USB-Hub (Type C and Type A)		1 x "PL2Sp-ElBox" A/D-switch-box with 8 pin plug-IN and USB-Type-C-OU
PLSp2-USBcable	USB-cable (Type A on one end / type C at the other end)		to connect with PrimeLab 2.0 Photometer
PLSp2-chargeEU PLSp2-UK/AUS/US	PrimeLab 2.0 charger with EU plus UK/AUS/US plug for PrimeLab 2.0 charger		1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl-electrode soaking solution
Other Accessories			1 x "EMphbuf700-20" 20 ml "pH 7,00" calibration solution 1 x "EMphbuf400-20" 20 ml "pH 4,00" calibration solution
PLSp2-Ad16/Ad1 PLSp-mft-1	PrimeLab 2.0 vial adapter for 16mm glass vials / 1ml Eppendorf vials Micro fiber cloth 13x13 cm for PrimeLab vials		1 x "EMphbuf1000-20" 20 ml "pH 4.00" calibration solution
PLSp2-carr2	Large PrimeLab 2.0 plastic carrying case	DI COD EL DIL - 154-	User manual
PLSp2-Alucase Reference standards	Aluminium trolley with foam inserts for PrimeLab 2.0 plus accessories	PL2SP-ElePHsolids	PrimeLab 2.0 Electrode-Basic-Kit "pH (solids)":grey carrying case with foam insert
PL2Sp-Ref112038-f	Reference standard kit for PrimeLab IDs 11 (chlorine by tablet), ID		1 x "PL2Sp-IJ44A" pH-Electrode for solids: Soils, creams, emulsions,
	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		foods. 8 pin plug, cable length = 1 meter Measuring range: 0.00 - 14.00 pH, resolution: 0.01 pH
	for ID 38 (~7.00 pH) as well as a ZERO vial.		1 x "PL2Sp-ElBox" A/D-switch-box with 8 pin plug-IN and USB-Type-C-O
PL2Sp-Ref122039-f	In a box with description. 1 year shelf life.  Reference standard kit for PrimeLab IDs 12 (chlorine by liquid), ID 20		to connect with PrimeLab 2.0 Photometer  1 x bottle with reference electrolyte
ELOP ROMELOGO	(cyanuric acid) and ID 39 (pH by liquid).		User manual
	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.		1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl-electrode soaking solution
	In a box with description. 1 year shelf life.		1 x "EMphbuf700-20" 20 ml "pH 7,00" calibration solution
PL2Sp-RefPTSA	2 x 100ml reference standards 500 µg/l PTSA, deionised water		1 x "EMphbuf400-20" 20 ml "pH 4.00" calibration solution 1 x "EMphbuf1000-20" 20 ml "pH 10,00" calibration solution
PL2Sp-RefFLSC PL2Sp-RefTRB	2 x 100ml reference standards 100 μg/l Fluorescein, deionized water 3 x 10ml reference standards 0.5 NTU, 10 NTU, 1000	PL2SP-ElePHsolidsATC	PrimeLab 2.0 Electrode-Basic-Kit "pH (solids) + Temp. (ATC)":
Electrodes / Probes	nH-Electrode		grey carrying case with foam insert
PL2Sp-IH40ATC	pH-Electrode Sealed gel electrode for samples with low contamination levels and		1 x "PL2SP-IJ44A/ATC" pH-Electrode for solids: Soils, creams, emulsions, foods. 8 pin plug, cable length = 1 meter. With
	reasonable ionic strength. 8 pin plug, cable length = 1 meter.		Temperature-reading and ATC.
PL2Sp-IH40ATC-ALK	pH-Electrode ("Low Sodium Error" version). Sealed gel electrode for samples with low contamination levels and		Measuring range: 0.00 - 14.00 pH, resolution: 0.01 pH 1 x "PL2Sp-ElBox" A/D-switch-box with 8 pin plug-IN and USB-Type-C-OI
DI 20n 1144A	reasonable ionic strength. 8 pin plug, cable length = 1 meter.		to connect with PrimeLab 2.0 Photometer
PL2Sp-IJ44A	pH-Electrode for solids: Soils, creams, emulsions, foods. 8 pin plug, cable length = 1 meter.		1 x bottle with reference electrolyte User manual
PL2Sp-IJ44A/ATC	pH-Electrode for solids: Soils, creams, emulsions, foods.		1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl-electrode soaking
	8 pin plug, cable length = 1 meter.		solution 1 x "FMohhuf700-20" 20 ml "nH 7 00" calibration 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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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 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.



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. 8 pin plug, cable length = 1 meter. Measuring range: +/- 1,000mV, resolution: 1mV  1 x "PL2Sp-ElBox" A/D-switch-box with 8 pin plug-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
PI 2SP-FIaORPotdisckit	Primel ah 2.0 Flactrode-Basic-Kit "ORP / Pt-disc for faster response":

User manual

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.
8 pin plug, cable length = 1 meter.
Measuring range: +/- 1,000mV, resolution: 1mV
1 x "PL2Sp-ElBox" A/D-switch-box with 8 pin plug-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

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). 8 pin plug, 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 8 pin plug-IN and USB-Type-C-OUT to connect with PrimeLab 2.0 Photometer

1 x "EMecbuf1413-20" 20 ml "1413  $\mu S$ /cm" calibration solution 1 x "EMecbuf1288-20" 20 ml "12.88 mS/cm" calibration solution User manual

### Kits

PrimeLab 2.0 Basic Kit 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)
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  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

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" HD-Colour-Touch Display16 wavelengths-scan (410 - 940nm) "90° ready" for NTU, PTSA, Fluorescein, Plankton Option of over 140 different parameters (chargeable activation required) 8.400 mAh Li-Ion-battery (built-in)Bluetooth 4.2 USB Type C 4G\* (via USB-Type-C Modem) Option to connect Electrodes (via USB Type C plus A/D-changer-Box) built-in camera to scan QR-Codes Self-Calibration-Mode with certificate (via LabCOM Software) "I-OTZ" Intelligent-One-Time-Zero compatible to the free of charge PrimeLab tools: LabCOM App/Software/Cloud (Android, iOS, Windows, Mac, Browser) 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 Eppendorff-vial adapter 2 x 10,5 cm stirring rod 1 x 10ml syringe 1 x cleaning brush for vials1 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)

### Technical Data

recr	micai Data
Dimensions:	10cm x 25.5cm x 5.9cm (width x length x depth)
Weight:	715g
Spectral range:	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
Parameters:	more than 140 parameters (flexible setup) User defined parameter function
Electrodes:	USB-type-C connector for pH/EC/TDS/ORP/Temp-Probes
Connectivity: (technical)	Bluetooth® 4.2 WiFi USB (type C) 4G* (via USB-modem)
Connectivity: (software)	LabCOM Software (Windows / Mac) LabCOM App (Android / iOS) LabCOM Cloud (web-browser)
Display:	5.5" Color-HD touch display
Camera:	In-built barcode / QR-code scanner
Calibration:	Auto-calibration function with certificate (software)
One-Time-Zero:	Intelligent OTZ (One-Time-Zero) function with recognition of ZERO types
Internal memory:	>5,000
Clock/Date:	RTC (Real-Time-Clock) with calendar function
Auto-Off:	Factory default setting = 10 minutes, Individual adjustment possible
Menu guidance:	Intuitive, display-controlled 4-button menu guidance; test instructions during measurement process
Power supply:	8,500 mA Li-lo-battery
Languages:	> 15
Environment:	5°C - 45°C / 30 - 90% rel. humidity
Water-proof rating:	The device is splash-water-proof (IP54)
Reagents:	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"!



# PRIME LAI 2.0

### THE ULTIMATE PHOTOMETER

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