

PRIMELAB1.0

Photometer meets Future

Photometers for electronic and highly accurate determination of water values are standard equipment in every laboratory.

Similarly, mobile phones are standard equipment in our daily lives, and yet over the past few decades they have continuously adapted to technical progress.

Do you still make calls today with a mobile phone of past generations from 10 or 20 years ago or do you prefer the benefits of smartphones with fast *Bluetooth*[®] - wireless technology -, synchronisation with your PC software, apps and many other technical advantages?

How about your photometer ...?

has it kept pace with technological progress, or do you still transmit your data via a serial port, an IR interface or even not at all!?

Is your data analysis restricted to predefined, parameters? Did you have a choice of which parameters you want to measure?

Is the performance of your photometer limited to a few or even only one wavelength?

Time for a change

Introducing the next generation of photometers!

Data connection via *Bluetooth*[®] - wireless technology - within seconds, similar to your smartphone in your car.

A sensor by JENCOLOR with unprecedented accuracy, able to measure all parameters where colour development is visible to the human eye after adding a reagent (visible wavelength).

Software that will offer you not only user based management of your measurement sources (e.g. pools) and related measurement data but also offer advice on adjusting the water values back to ranges defined by you.

Software allowing you to easily upload additional parameters on your Photometer.

A device that auto-calibrates itself within milliseconds at the push of a button without having to return it to the manufacturer!



AB



Sensor/Optics by

JENCOLOR

Colours and their wavelengths

colour	wavelength (nm)
purple	380 - 420 nm
blue	420 - 490 nm
green	490 - 575 nm
yellow	575 - 585 nm
orange	585 - 650 nm
red	650 - 750 nm

The difference

When a coloured reagent is added to a water sample using a conventional photometer, light is passed through the sample, with an LED at a specific wavelength, to a sensor placed on the other side of the sample which detects how much light has passed through the water sample (transmission). From this single value on one wavelength then the water value, such as "pH 7.25", is determined, using a table previously defined in the unit.

Currently measurement of a comprehensive range of parameters on one device has required either installation of several light sources and sensors (set to specific wavelengths) or use of colour interference filters, to generate different wavelengths. Only one specific wavelength is measured using this technique only allowing limited parameters.

The JENCOLOR MultiColor sensor has the required filters already installed on the sensor itself, and measures across several channels. This enables the PrimeLab to measure all parameters that, after addition of a reagent, show a visible colour – with unprecedented precision, because the measurement is performed not "around" but precisely at the wavelength range of the sample measuring the colour in seven different scales simultaneously.

Tests have shown that the JENCOLOR sensor, once calibrated, achieves 98 % of the accuracy of a spectrometer! And all this with only 1 light source and only 1 sensor!

The PrimeLab is even future proof as you are able to add Parameters that are not installed on the device at purchase and can be conveniently installed by using "PrimeLab Desktop Assistant" software.



1 Light-Source 1 Sensor ALL Parameters

Sometimes little miracles happen when two completely different industries happen to meet and previously unforeseen synergies arise.

This is happened when we started the development of the "PrimeLab" in late 2010 with our development partner.

JENCOLOR

JENCOLOR is the brand of a subsidiary of a globally renowned optics and sensor manufacturer, with its headquarters in Jena in Thuringia, Germany. The "JENCOLOR Multiple Color" sensors are currently used in medical equipment, pre-press and even in passenger aeroplanes for LED light control in the cabin.

Technology / Colour

The Human Eye sees colour when light falls on to the subject and light waves return to the human eye. Depending on the shape of this wave – this is called "wavelength" – we see different colours, such as red, green, etc. The wavelengths visible to the human eye range from 380 to 780 nm. All colours recognizable by the eye are in this range (see graph).



 Define any number of "accounts" (addresses, measuring sources with volume specifications...). Each measurement performed with the PrimeLab is assigned to such an "account".

• Transfer of 20 "Accounts" to the PrimeLab per mouse click.

 Synchronization of measurement data between the PrimeLab and the "PrimeLab Desktop Assistant"

Dose recommendation

• You can input the water treatment chemicals that you use and ideal ranges for each parameter you can get dosage recommendations calculated, view them and print them.

 Store your individually used water treatment chemicals (e.g. "pH Minus").

Store ideal ranges for each measurement parameter (e.g. "pH 7.2 - 7.4").

Assistant"

PrimeLab Desktop Assistant One of the innovations of the "PrimeLab 1.0" is the lightning-fast wireless technology of the photometer to a Windows PC via Bluetooth[®].

The "PrimeLab 1.0" connects instantly and automatically after each power-up, just as you know it e.g. from your smartphone when entering your car.

sktop Each "PrimeLab 1.0" with integrated Bluetooth[®]module is supplied with a *Bluetooth*[®]-USB dongle Ď with which you can add wireless connection capability to your computer if this is not already enabled. "PrimeLab

The Windows software "PrimeLab Desktop Assistant" is a strikingly powerful tool that allows you:

> Activating further measurement methods on the PrimeLab

Convenient management and reporting of test results

Dosage recommendations, based on our individual water treatment chemicals

Updating the PrimeLab firm and software Remote control your PrimeLab

available from now on

The Software



Account-data Ac	ccount on	device					
CAccount informa	ation —						
First name:			Last	name:			Search
			Zip:				Write to
Street:			Telep	hone:			PrimeLab
				_			
Write to Prim	neLab	Account-No.	First nam	e Last name	PLZ	Stadt	Straße
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		11111	Pet 📥	Measu	re		
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<			X	Delete	Accour	nt info	
			4	Clear t	able		

The App Andoid

Apple Windows

PrimeLab

to powerful

platform



The PrimeLab app for Android, iPhone, iPad and Windows phone lets you easily connect via

Bluetooth[®] with your PrimeLab device for complete remote control operation and even cloud

services. Using PrimeLab Desktop Assistant software in combination with the PrimeLab App and our free cloud solution gives you instant access to all your test data no matter where you

are. Like the PrimeLab Desktop Assistant, the App allows you to connect, remote control and

update your PrimeLab device. Activating additional parameters on your PrimeLab via the app is possible as well. The PrimeLab App for Android/iPhone/iPad and Windows phones will be



 Subsequent uploading of · Overview of all methods of additional parameters on the PrimeLab by entering a code into the software.

• Remote control of the PrimeLab.

measurement with display of measurement ranges and stored ideal ranges.

Convenient reporting

date and / or parameter.

function for printing results:

account-related, selected by

 Definition of customized ideal ranges per parameter.



• Update of the PrimeLab firmware and the "PrimeLab Desktop Assistant" software by mouse click.

Setting date and time /

Internet access / reset to

factory default values.

of your machine.

via the forum on www.PrimeLab.org.

 Personalisation of the water per parameter in the PrimeLab / individual naming section "Glossary".

> Connection of multiple PrimeLabs to the software

ID Act	Parameter/Methode	Test-Range	Resolution	Reagent
ACI 1	Active Oxyg. (MPS)	0 - 40 mg/l	0.1	Tablet
<u>Ак</u> 5 121	alinity Alkalinity-M Alkalinity-M (HR)	5 - 200 mg/l 0 - 500 mg/l	1	Tablet Tablet
6 Alu	Alkalinity P minium	5 - 300 mg/l	1	Tablet
4 Am	Aluminium monia	0 - 0.3 mg/l	0.01	Tablet
2 Bor	Ammonia (LR)	0 - 1 mg/l	0.01	Tablet
7 Bro	Boron	0 - 2 mg/l	0.1	Tablet
8 63 128	Bromine Bromine Bromine	0 - 18 mg/l 0 - 18 mg/l 0 - 4.5 mg/l	0.01 0.01 0.01	Tablet Powd./Liq. Powder
Car 71	bohydrazide Carbohydrazide	0 - 1.3 mg/l	0.01	Liquid
Chl 95	oramines (Mono-/Di-) Chloramines	0 - 8 mg/l	0.01	Tablet
Chl 10 124	oride Chloride Chloride	0.5 - 25 mg/l 0 - 100 mg/l	0.1 0.1	Tablet Liquid
129 11 12 122 122 15 14	orine Chlorine libre Chlorine Chlorine Chlorine (MR) Chlorine (HR) (KI) Chlorine (HR) (KI)	0 - 2 mg/l 0 - 8 mg/l 0 - 8 mg/l 0 - 10 mg/l 0 - 200 mg/l 5 - 200 mg/l	0.01 0.01 0.01 0.01 1 1	Powder Tablet Liquid Tablet Liquid Tablet
16 64 130 108	Chlorine Dioxide Chlorine Dioxide Chlorine Dioxide Total Oxidant	0 - 15 mg/l 0 - 15 mg/l 0 - 5 mg/l 0 - 8 mg/l	0.01 0.01 0.01 0.01	Tablet Liquid Powd./Liq. Liquid
106	Chlorite	0 - 8 mg/l	0.01	Liquid
94 103	Chromium (hexavalent) Chromium (hexaval.)	0 - 2.2 mg/l 0 - 1 mg/l	0.01 0.01	Liquid Powd./Liq.
79 80 17	COD (LR) COD (MR) COD (HR)	0 - 150 mg/l 0 - 1500 mg/l 0 - 15000 mg/l	1 1 1	Prepared Prepared Prepared
Col 107	our Colour	15 - 500 mg/l	1	-
18 19	oper Copper Copper	0 - 5 mg/l 0 - 5 mg/l	0.01 0.01	Tablet Powder
20 20	Cyanuric Acid	2 - 160 mg/l	1	Tablet
65 82	DBNPA DBNPA	0 - 13 mg/l 0 - 13 mg/l	0.01 0.01	Liquid Tablet
21	DEHA thorbic Acid	20 - 1000 µg/l	10	Liquid
Flue	Erythorbic Acid orescein	0 - 3.5 mg/l	0.01	Liquid
Fluo 72	Fluorescein oride Fluoride	0 - 2 mg/l	0.01	- Liquid
Har 78 9	Calcium Hardn. Calcium Hardn. (HR)	0 - 500 mg/l 50 - 1000 mg/l	1	Tablet Tablet

D Har	Parameter/Methode	Test-Range	Resolution	Reagent
56	Total Hardn. (LR)	2 - 50 mg/l	1	Tablet
57	Total Hardn. (HR)	20 - 500 mg/l	1	Tablet
148	Iotal Hardn. (HR)	0 - 200 mg/l	1	Liquid
23	Hvdrazine	5 - 600 µg/l	1	Liquid
Hyc	lrogen Peroxide	0 000 µg/.	·	
24	Hyd. Peroxide (LR)	0 - 3.8 mg/l	0.01	Tablet
56	Hyd. Peroxide (LR)	0 - 3.8 mg/l	0.01	Liquid
20 1∩9	DFWAN-50	0 - 200 mg/l	1	Liquid
Hyc	droquinone	o oco mg/i		Elquid
26	Hydroquinone	0 - 2.5 mg/l	0.01	Liquid
odi	ine Jadina	0.29 mg/l	0.01	Tablat
27 87	Iodine	0 - 20 mg/l	0.01	
ror	1001110	0 - 20 mg/i	0.01	Liquid
28	Iron (LR)	0 - 1 mg/l	0.01	Tablet
29	Iron (MR)	0 - 10 mg/l	0.01	Powder
127	Iron (MR) ferrous	0 - 10 mg/l	0.01	Powder
50 1.32	Iron total	0 - 30 mg/l	0.01	Powder
sol	thiazolinone	o o mg/i	0.01	1 official
38	Isothiazolinone	0 - 10 mg/l	0.1	Liquid
Leg	ionella	60 100000 ofu	1	Liquid
147 Mao	anesium	60 - 1000000 ciu		Liquid
93	Magnesium	0 - 100 mg/l	1	Tablet
Mag	gnanese		2.4	T 1 1 4
31 Mat	Manganese (LR)	0.2 - 5 mg/l	0.1	lablet
69	Methylethylketoxime	0 - 4.1 mg/l	0.01	Liquid
Mol	ybdate			
96	Molybdate (LR)	0 - 15 mg/l	0.01	Tablet
134 22	Molybdate (HR)	0 - 40 mg/l	0.1	Tablet
33	Molybdate (HR)	5 - 200 mg/l	0.1	Liquid
Nic	kel			
90	Nickel (HR)	0 - 7 mg/l	0.1	Tablet
	NICKEI (HR)	0 - 10 mg/l	0.1	Liquid
34	Nitrate	0 - 11 ma/l	0.1	Powd./Lic
Nitr	ite			
35	Nitrite (LR)	0 - 0.5 mg/l	0.01	Tablet
36	Nitrite (HR)	5 - 200 mg/l	0.1	Powder
101	Nitrite (HR)	0 - 3000 mg/l	1	
Ozo	one			
37	Ozone	0 - 5.4 mg/l	0.01	Tablet
92 Dha	Ozone	0 - 5.4 mg/l	0.1	Liquid
98	Phenol	0 - 5 mg/l	0.01	Tablet
PHI	VIB			
43	PHMB	2 - 60 mg/l	1	Tablet
Phc 17	Phosphate (LP)	0_1_mg/l	0.01	Tablat
45	Phosphate (LR)	0 - 4 mg/l	0.01	Powd /Lic
46	Phosphate (HR)	0 - 80 mg/l	0.1	Tablet
47	Phosphate (HR)	0 - 100 mg/l	0.1	Liquid
Pho 27	Sphonate Rhosphonate	0 20 mg/l	0.01	Liquid
110	Phosphonate	0 - 20 mg/l	0.01	Tablet
ρΗ	- Value			
40	pH-value (LR)	5.2 - 6.8	0.01	Tablet
38_	pH-value (MR)	6.4 - 8.4	0.01	lablet

Parameters list

Since via the "PrimeLab Desktop Assistant" it is simple to upload additional parameters by entering a code within minutes and also long after purchase of the device. The software will actively alert you when updates are available!

As per 07/2015

ID	Parameter/Methode	Test-Range	Resolution	Reagent
39	pH-value (MR)	6.4 - 8.4	0.01	Liauid
pН	- Universal			
41	pH-Universal	5 - 11	0.1	Tablet
Pol	vacrvlate	4 - 11	0.1	Liquia
85	Polyacrylate	1 - 30 mg/l	0.1	Liquid
Pol	yamine	0 100 //	4	1.1
125	Acsamine 28F	0 - 100 mg/l 0 - 100 mg/l	1	Liquid
146	Acsamine CCA	0 - 100 mg/l	1	Liquid
126	Acsamine DW	0 - 100 mg/l	1	Liquid
141	Acsamine DWBR1	0 - 100 mg/l	1	Liquid
142	Acsamine SW	0 - 100 mg/l 0 - 100 mg/l	1	Liquid
144	Acsamine SWC	<u>0 - 100 mg/l</u>	1	Liquid
Pot	assium Deteccium		0.1	Tablat
48 PT		0.7 - 12 mg/l	0.1	laplet
111	PTSA	0 - 1000 µg/l	1	-
QA	C	05 450 mm/	4	Tablat
83 Sili	QAC cia	25 - 150 mg/l	1	lablet
49	Silica (LR)	0 - 5 mg/l	0.01	Pow./Liq.
50	Silica (HR)	0 - 100 mg/l	1	Powder
50	Sodium Hypochlorite	0.2 - 40 %	0.1	Tablet
68	Sodium Hypochlorite	0.2 - 40 %	0.1	Liquid
Sul	phate			
54	Sulphate	5 - 100 mg/l	1	Tablet
Sul	phide	5 - 100 mg/i		Powder
52	Sulphide	0.04 - 0.5 mg/l	0.01	Tablet
140	Sulphide	0 - 0.7 mg/l	0.01	Liquid
53	Sulphite (LR)	0 - 5 mg/l	0.1	Tablet
105	Sulphite (HR)	<u>0 - 300 mg/l</u>	0.1	Tablet
Sus	spended solids	0 750 mg/l	1	
Tan	nic acid	0 - 750 mg/i		-
91	Tannic acid	0 - 150 mg/l	0.1	Liquid
Tra	nsmission	0 400 %	0.4	
114	Transmission-420 nm	0 - 100 % 0 - 100 %	0.1	
116	Transmission-520 nm	0 - 100 %	0.1	
117	Transmission-570 nm	0 - 100 %	0.1	
118	Transmission-620 nm	0 - 100 %	0.1	
Tur	bidity	0 - 100 %	0.1	
59	Turbidity	20 - 1000 FAU	1	-
112	Turbidity	0 - 1100 NTU	0.01	-
120	Urea	0.1 - 2.5 mg/l	0.1	Tabl /Lig
Zin	C			raist./ Eig.
62	Zinc	0 - 1 mg/l	0.01	Tablet

Adapter kits for Turbidity (0-1100 NTU) / PTSA and Fluorescein

Some test procedures, such as Turbidity (NTU), PTSA and Fluorescein, require scattered rather than direct light (LED -> sensor). To achive this and to still use all functionality of your PrimeLab, e.g. *Bluetooth*[®] connectivity, use of software, app and cloud services etc., an adapter is used which shines your water sample from above, enabling the PrimeLab to measure using scattered light (90° angle between adapter and sensor).

The adapter comes in a black carrying case with professional lab-pipette, all neccessary calibration-solutions, batteries and a glass vial. Adapter and PrimeLab communicate by light. You do not even need to switch on the adapter. It will be auto-detected.

PrimeLab Turbidity-Adapter

PrimeLab-Adapter for either

PRIMELAB

Turbidity (NTU)

Fluorescein

PTSA

If turbidity should be measured in low ranges (below 20 NTU) the nephelometric method in which the LED does not shine directly through the water sample to the sensor (as in FAU), but at a 90° angle, is used.

This process can be recognized by the suffix "NTU" / "FTU" or "FNU" as the measured value. More information on the nephelometric principle can be found in DIN EN ISO 7027. The PrimeLab-Turbidity-Adapter is based on secondary standards, verified against formazine (international turbidity standard) standards and uses a white-light source.

PrimeLab PTSA-Adapter

PTSA (1,3,6,8-pyrenetetrasulfonic acid tetrasodium salt) is a stable fluorescent tracer dye that emits wavelengths between 400 and 500 nm when irradiated with UV light. It provides an excellent choice for the active on-line monitoring of cooling water treatment when a fixed known amount is added to the inhibitor being dosed. Once added to the water circulation system it is stable over time, does not react easily with other substances and is environmentally safe. The PrimeLab-PTSA-Adapter uses a UV-light source.

PrimeLab Fluorescein-Adapter

Fluorescein is a stable fluorescent tracer dye that emits green light with wavelengths between 520 and 530 nm upon excitation with blue light with a maximum absorption at 495 nm. It provides an accurate, cost effective method for monitoring industrial boiler applications when a fixed known amount is added to dosage program. Once added to the water circulation system it is stable over time and is environmentally safe when dosed at the concentrations required for boiler water analysis.

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PrimeLab-Turbidity-Adapter kit

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Basic equipment

- · PrimeLab Multitest with integrated *Bluetooth*[®]-module
- Black plastic case
- DC adapter (220/110 V) with interchangeable international plugs
- 4 × AAA 1.5 V batteries
- Bluetooth[®]-USB dongle for wireless connection to your PC
- CD-ROM "PrimeLab Desktop Assistant"
- 2 × 24 mm standard round cuvette (glass / 10 ml) with light absorber

integrated into lid

- · Light protection lid for 16 mm standard cuvettes
- 10 ml syringe
- · Cleaning brush for cuvettes
- Stirring rod

Optional

- Adapter for COD 16 mm "Prepared" cuvettes
- 100 ml plastic measuring tube
- Filter unit for filtering water samples

Installed parameters/ measurement methods

The parameters / measurement methods installed on the PrimeLab may be individually defined by the user and extended at any time after purchase by entering activation codes into the software. Thus also subsequently developed measurement methods can still be installed.

> The PrimeLab will never become obsolete.

Technical details / features

Dimensions:	175 mm × 88 mm × 59 mm
Weight:	160 g
Spectral range:	380 nm – 780 nm with 7 open channels and ±40 nm overlap each
Data Transmission:	Built-in <i>Bluetooth[®]-</i> module
Calibration:	Auto-calibration by JENCOLOR sensor; determination of LED brightness
One Time Zero:	Intelligent OTZ (One Time Zero) function, detecting different ZERO types
Internal memory:	100 data records / 20 accounts records
Clock / Date:	RTC (real-time clock) with date function
Auto-Off:	Default = 10 minutes. Individually adjustable
Menu navigation:	Intuitive, display-controlled 4-button menu system; test instructions during the measurement process (can be skipped)
Power supply:	optionally 4 × 1.5 V AAA batteries or 100–240 V AC, 50/60 Hz, 0.2 A → 5.0 V, 1200mA, 6 W
Display:	Graphical LCD display, monochrome
Operating languages:	German, English, Spanish, French
Environment:	5 °C – 45 °C (41 °F – 113 °F) / 30 % – 90 % rel. humidity
Water resistancy:	The unit is splash-proof
Reagents:	The calibration curves of the individual parameters are matched to the reagents offered by the manufacturer. The use of reagents by other manufacturers may result in measurement errors! The scope of delivery of the PrimeLab includes solely high-quality reagents

"Made in Germany" and "Made in Britain"!

PRIMELAB1.0

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The "PrimeLab 1.0 Multitest" is a high-tech photometer of the latest generation.

Small and handy, but incredibly powerful thanks to the multi-spectral JENCOLOR sensor.

Quick and easy wireless connection via Bluetooth[®] to a PC and the "PrimeLab Desktop Assistant" software.



Use the Software "PrimeLab Desktop Assistant" for:

Uploading further measurement methods on the PrimeLab Convenient management of test results with reporting function

Create proposals for water treatment on the basis of measurement results by entering your water treatment chemicals as well as ideal ranges (min/max) per parameter.

Update the PrimeLab firm- and software

Remote control your PrimeLab



Supported by:

Federal Ministry of Economics and Technology Zentrates Innovationsprogram

für wachstum

on the basis of a decision by the German Bundestau





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12 years of Water-i.d.[®] (2003 - 2015)

Distributed by:	Tallaght Business Park	Quatro House, Frimley Road,
	Whitestown, Dublin 24,	Camberley,
	Ireland	United Kingdom
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We will be pleased to send you contact details of our distribution network around the globe.

NEW - THE PRIMELAB APP!

THE PRIMELAB APP IS PROBABLY THE MOST POWERFUL AND COMPLETE PHOTOMETER TOOL IN ITS FIELD!

THE APP

Through wireless connection to PrimeLab photometer you can create accounts (measurement sources), confirm GPS coordinates, synchronize measurements and remotely controlled measurements, calculate indices such as the Langelier Index, display measured journals and send them via PDF or Excel file, test and set parameters and add new parameters by entering a code to make the PrimeLab more comprehensive, input your own water chemicals to create dosing recommendations. Free Cloud storage system is available and, when activated, can be consulted so that the measurement results automatically synchronize to and from any Android or iOS-based system (iOS as of June 2015).

	100	ininetab		**
		Assessed	11-Chlorine-tab	
5	-	Parameters	1) Fill a cleaned cell (Mner) with 10mi of sample.	your
	-	information and FD	2) Close the lid, place the call into the photose part of the answ on the call, and parts.	press
d	4	Remate Control		
1	0	Setup		
	£	Configure PrimeLal Corrected to Taxe is	6 14	
			Cancel Zero	
		+	, <u> </u>	

Users such as public swimming pools, building service engineers, shipping companies, health

departments, water companies and many others can view the field test results from their location at any time and immediately after the measurement. The App is currently available in German, English, Spanish, French, Italian, Russian and Chinese for download.

ACCOUNTS

In the PrimeLab itself, in the software "PrimeLab Desktop Assistant" and in the App, test results are assigned to "Accounts". Accounts can be set so that different locations of a public bath e.g. trainer pool, splash pool etc. have their results assigned to them building service engineers would assign boiler 1, boiler 2 etc. so that they can track and report their results. An account always defines the measurement source. At the start of the measurement on the PrimeLab, whether directly or through the App or the software firstly an "Account" will be requested where the measurement is to be saved. These accounts can be created in the App, as well the PC software.

Accounts D	Equat.4	Equat Accounts		Roberts Pe	inel alb
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GPS COORDINATES

In the App, it is also possible to store a card module; the GPS coordinates for each account. If the account data measuring the volume of the source (e.g. 50m³ pool) is entered, this information is used for the calculation of dosing recommendations.



MEASUREMENT RESULTS

Click on an account to view the measurement results. These originate either from automatic synchronization with the PrimeLab when measurements were made with this without using the App as a remote control or by remote-controlled measurement of PrimeLab using the App or PC desktop assistant.

The measurement results are set according to accounts and in chronological order. This can be filtered (date, parameters) and exported as an Excel file or as a PDF. Also, the calculation factor can be triggered in this menu, a LSI (Langelier Saturation Index) and RSI (Rysnar Stability Index).

Test parameters not generated by the PrimeLab but necessary for the calculation of the indices values, such as temperature, conductivity, flow rate, etc. can be entered manually into the App and the desktop assistant software.

Click on "Dos Rec" in the result detail view, the user is prompted for the target value and receives on the basis of the measured value associated with the amount of water (stored under the relevant account) and the individual "Setup" stored water treatment chemicals, a dosing recommendation to the water parameters to set ideal conditions for your water based on the chemicals you use.

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NEW - THE PRIMELAB APP!

THE PRIMELAB APP IS PROBABLY THE MOST POWERFUL AND COMPLETE PHOTOMETER TOOL IN ITS FIELD!

REMOTE CONTROL

The PrimeLab connects with the App in SECONDS and can be controlled remotely from then. The small monochrome display PrimeLab is then replaced by the large, colour touch-screen of your smartphone or tablet. Select account, select parameters and start measurement.

As displayed on the PrimeLab in offline mode, the individual test sequences are shown step by step in the App and the PC software. At the end of the result, which was measured immediately below the account that appears is stored and, if the Cloud was activated, is also available online.

WATER CHEMICALS

As mentioned under "results", the App, and PC software allows the user to give dosage recommendations based on their own individually stored water treatment products. It must be inserted once so that you can use your own water treatment chemicals in the App / PC software that will then be available for calculation of dosing recommendations.

PARAMETERS

As in the software the user can unlock additional parameters even after the acquisition of the PrimeLab in the App. This also applies to parameters that are developed first after the equipment is purchased from us, for App, as well as PC software, the parameter list are constantly updating and thus always offer the latest version parameter.

Just click on the parameter and then click "Activate" button, input a (chargeable) 8-digit code and seconds later the parameter is available on the PrimeLab.

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THE CLOUD

The free PrimeLab Cloud with servers in Europe and Asia is one of the highlights of the App. Simply enter an email address and the password you would like and its done. The data is synchronized from that moment with the Cloud. Log in now with any other smartphone, tablet or PC software (as of July 2015) under the same login information and you can immediately see the same accounts and measurement results on all devices. Especially useful for public baths in countries with a duty to report for water utilities where you want to see real-time measurement data of the service staff centrally and shipping companies that want to monitor the water quality of the in-transit ships, free Cloud solution is a real benefit.For companies that wish to connect their own Cloud, PrimeLab development team provides quick and easy solutions.



THE WEB MODULE

By using the web module you can read your data synchronized with the cloud,create reports, invite other users, add manual measurements, calculate indices and change your login data.

The PrimeLab App is available now on the Google Play Store for Android users, as of July 2015 for iOS users and Windows Phone users to download. Expected to be available from June 2015 Windows Phone version will replace the currently used Windows PC software "PrimeLab Desktop Assistant".



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1 HOUR LEGIONELLA SPP TEST ON PRIMELAB 1.0 PHOTOMETER

QUANTITATIVE (60-10[°] cfu/L) and certified (acc. to ISO), patented immuno-magnetic method

LEGIONELLA - WHAT IS IT?

In aerosols generated by a shower head of a hospital or a hotel, in a car wash or in an industrial cooling system, there may be water droplets brimming with bacteria. This is how Legionella reaches us, through inhalation.

Legionella sp. can travel huge distances. Cases of infection have been reported in a radius of up to 10 km away from the source. Near or far, if Legionella reaches our lungs it will behave in a very similar way, either colonizing or invading. In a few days pneumonia will develop.

Legionellosis is a systemic infectious disease that primarily affects the lungs and has a mortality rate between 5% and 30%.

Of the total cases reported, 95-98% can be attributed to Legionella pneumophila. This disease is a hot topic in the field of Public Health, as its average mortality rate is 12%-15% and it can easily reach 30-50% in patients with weak immune systems or who do not receive antibiotics promptly.

ADVANTAGE OF LEGIPID[®] + PRIMELAB

Current standard recommended Legionella test is based on a cultural method, needing up to 2 weeks for Legionella bacteria to grow and to be counted which is far too long to take action and to prevent danger.

The new Legipid[®] test is based on a patented, immunomagnetic method, detecting only living Legionella sp. As tests develops a readable color, it now got adapted on the PrimeLab 1.0 multitest photometer.

How does it work?

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Whilst the common cultural method needs an agar on which legionella have to grow to be counted after several days, Legipid[®] works differently.

1 litre of sample water is filtered to concentrate Legionella on a filter paper. Legionella on filter paper gets released in a small vial where "L1" is added. "L1" is a patented solution, containing immuno-magnetic particles (antibodies), only attaching to living Legionella sp.

After several washing steps, a colouring solution is added to colour the captured Legionella.

Concentration of the colour is in relation to concentration of Legionella in the sample which makes it possible to be tested by the PrimeLab 1.0. Result is displayed as cfu per litre.

TEST RESULT IN JUST 1 HOUR

QUANTITATIVE 60-10^{°°} CFU/L

CERTIFIED AGAINST CULTURE

NEW, PATENTED METHOD

LEGIONELLA FAST DETECTION

LIVING LEGION. SP DETECTED



MORE INFORMATION



QUANTITATIVE (60-10[°] cfu/L) and certified (acc. to ISO), patented immuno-magnetic method

LEGIPIO[®] TEST KIT



Legipid[®] test kit comes with all you need to run Legionella tests, apart from the PrimeLab plastic adapter for 1ml vials and a filter kit to filter your water sample.

Both, adapter and filter kit, is available as accessories. Legipid[®] is offered as a kit of 10, 40 or 100 units. Each test requires just one "ZERO".

HIGH-RISK FACILITIES

Legionellosis is a worldwide health issue. Each year, 6,000 cases are registered in Europe and between 8,000 and 18,000 people are hospitalized in the USA.

EGIONELLA FAST DETECTIO

t uses

Mortality rate figures range from 6% to 15% every year, likely to be an underestimation, since many countries are unable to provide mortality figures.

High-risk facilities include:

D24 RFK3

Tel: (01) 4523432

ax: (01) 4523967

Distributed

Lab Unlimited

Cooling towers and evaporative <u>condensers</u> Hot water systems with water tanks and return circuits - Heated water systems with recirculation through high speed water jets or air injection - Industrial humidifiers - Internal systems for cold water intended for human consumption (pipes, water tanks,cisterns or mobile tanks)		- Fire extinguishing systems that		
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		ns with speed	 Other devices that store water and produce aerosols Respiratory therapy equipment Respirators Nebulisers 	
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- Hot water systems without <u>a return circuit</u>				
- Evaporative cooling equipment which sprays water				
- Humidifiers - Ornamental fountains - Sprinkler water systems in urban environments				
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GU16 7ER

Tel: 08452 30 40 30

Fax: 08452 30 50 30 E-mail: info@labunlimited.com E-mail: info@labunlimited.co.uk Web: www.labunlimited.com Web: www.labunlimited.co.uk

REQUIREMENTS

For all those who currently use a PrimeLab, all you need, is an update through the PrimeLab Desktop Assistant Software or the App, an activation code for ID 147 (Legionella) and a small plastic adapter to use 1ml Legionella vials. If you do not yet have a PrimeLab, it benefits from more than 120 different test methods, starting with A for Alkalinity to Z for Zinc. JENCOLOR sensor technology allows parallel testing on 400 different wavelengths ensuring outmost accuracy of test results.

Wireless bluetooth technology, free software and App, individual parameter setup, free cloud service, dosage recommendations based on your individual water treatment chemicals, activation of more parameters at any time, reports per account (test sources), Turbidity (NTU) along with PTSA and Fluorescein by adapter... to name just a few of the benefits of the PrimeLab 1.0 Multitest photometer.