

PROBEBOX 1.0

USER MANUAL



Content

Status LED	3
General notes	4
Connect	5
Calibration – pH-probes	6-8
CHECK – ORP-probe	9
Calibration – EC-probes	10-12
Perform a measurement	13
Notes – pH-probes	14
Notes – ORP-probes	15
Notes – Conductivity-probes	16
Single electrodes	17
ProbeBOX kits	18-21
Calibration-/electrode solutions	22
Accessories	23
Technical data	24
Certification	25
Disposal	26
Certificate of Compliance	27



Status LED

Colors Of LED

● Green :	No sensor attached
● Blue :	pH sensor attached
● Yellow :	ORP sensor attached
● Purple :	EC sensor attached
○ White :	Bootloader mode
● Red :	ERROR

The position of the status LED is located under the hole of the top overlay.



Note:

The ProbeBOX 1.0 has:

- NO display
- NO batteries
- NO wireless connection (WiFi or Bluetooth®)

General Notes

Please read the following instructions carefully, because these must be strictly observed to ensure accurate measurements:



Remove the protective cap of the electrodes



Remove any salt deposits by rinsing the electrode with tap water



Remove any air bubbles that may have formed in the bulb by shaking the Electrode like a medical thermometer



Run a calibration if the electrode is new or if it was not used for a longer period of time



Rinse electrodes with distilled water after each measurement or calibration to avoid contamination between the different solutions. Never wipe the membrane with tissue or paper towels.



Ensure the quality of the reference solutions (expiry date, opening date)



If you have reference solutions in bottles, do not calibrate directly in the bottles



Never reuse used reference solutions

Connect

Connect an electrode

Steps:

- Remove the rubber cap
- Plug in the connector of the electrode
- Screw the silver ring on the electrode connector to hold the plug in place



Connect with PrimeLab 2.0 or LabCOM App/Software via USB cable

Steps:

- Remove the rubber cap
- Plug the USB cable to the USB connector
- Plug the other side of the USB cable to the USB connector of the PrimeLab 2.0


The device will switch on automatically.



pH-probe-calibration

1. Connect the ProbeBOX 1.0 to the PrimeLab 2.0 via the USB-cable.

2. Connect a pH-electrode to the ProbeBOX 1.0 via the 8 pin plug cable.

3. Go to the main menu on your PrimeLab 2.0 and tap on the "ProbeBOX 1.0" Icon. 

4. Tap on "Calibrate".

(Note: You can calibrate only when the PrimeLab 2.0 has correctly identified the electrode and the ProbeBOX 1.0)

5. Select your preferred calibration type.

(Either 1-Point Calibration, 2-Point Calibration or 3-Point Calibration).

**IMPORTANT: If you choose to perform a 2- or even 3-Point-Calibration, Always clean the electrode between the calibration steps with distilled water!
Otherwise the calibration may be incorrect.**

1-Point-Calibration

a) Select „pH 7.00" from the drop-down menu

b) Rinse the electrode with distilled water and then immerse it in a „pH 7.00" calibration solution.
Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

c) Tap on "Set Reference"

The device will calibrate now

Wait until „Calibrating" will be replaced by „Done"

Depending on the temperature and the electrode, this may take some time (1 minute).

d) Tap on "Save Calibration"

2-Point-Calibration (acidic environment)

a) Select „pH 7.00" from the drop-down menu

b) Rinse the electrode with distilled water and then immerse it in a „pH 7.00" calibration solution.
Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

c) Tap on "Set Reference 1"

The device will calibrate now

Wait until „Calibrating" will be replaced by „Done"

Depending on the temperature and the electrode, this may take some time (1 minute).

d) Tap on "Save Calibration"

Continue...

pH-probe-calibration

e) Select „pH 4.00“ from the drop-down menu

f) Rinse the electrode with distilled water and then immerse it in a „pH 4.00“ calibration solution.
Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

g) Tap on "Set Reference 2"

The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

h) Tap on "Save Calibration"

2-Point-Calibration (alkaline environment)

a) Select „pH 7.00“ from the drop-down menu

b) Rinse the electrode with distilled water and then immerse it in a „pH 7.00“ calibration solution.
Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

c) Tap on "Set Reference 1"

The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

d) Tap on "Save Calibration"

e) Select „pH 10.00“ from the drop-down menu

f) Rinse the electrode with distilled water and then immerse it in a „pH 10.00“ calibration solution.
Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

g) Tap on "Set Reference 2"

The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

h) Tap on "Save Calibration"

Continue...

pH-probe-calibration

3-Point-Calibration

a) Select „pH 7.00“ from the drop-down menu

b) Rinse the electrode with distilled water and then immerse it in a „pH 7.00“ calibration solution.
Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

c) Tap on "Set Reference 1"

The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

d) Tap on "Save Calibration"

e) Select „pH 4.00“ from the drop-down menu

f) Rinse the electrode with distilled water and then immerse it in a „pH 4.00“ calibration solution.
Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

g) Tap on "Set Reference 2"

The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

h) Tap on "Save Calibration"

i) Select „pH 10.00“ from the drop-down menu

j) Rinse the electrode with distilled water and then immerse it in a „pH 10.00“ calibration solution.
Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

k) Tap on "Set Reference 3"

The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

l) Tap on "Save Calibration"

ORP-probe-CHECK

ORP probes do not require calibration. If you are not sure about ORP probe quality or measuring value, use Water-I.D. ORP 468mV standard solution EMorpbuf468-500, to check if the ORP electrode is still in good condition.

1. Connect the ProbeBOX 1.0 to the PrimeLab 2.0 via the USB-cable.



2. Connect an ORP-electrode to the ProbeBOX 1.0 via the 8 pin plug cable.

3. Go to the main menu on your PrimeLab 2.0 and tap on the "ProbeBOX 1.0" Icon.

4. Tap on "Calibrate".

(Note: You can calibrate only when the PrimeLab 2.0 has correctly identified the electrode and the ProbeBOX 1.0)

5. With ORP-probes, only a 1-Point-Calibration is selectable

6. Select „+468 mV“ from the drop-down menu

7. Rinse the electrode with distilled water and then immerse it in a „+468 mV“ calibration solution. Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

8. Tap on "Set Reference"


The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

9. Tap on "Save Calibration"

EC-probe-calibration

1. Connect the ProbeBOX 1.0 to the PrimeLab 2.0 via the USB-cable.
2. Connect a pH-electrode to the ProbeBOX 1.0 via the 8 pin plug cable.
3. Go to the main menu on your PrimeLab 2.0 and tap on the "ProbeBOX 1.0" Icon. 
4. Tap on "Calibrate".
(Note: You can calibrate only when the PrimeLab 2.0 has correctly identified the electrode and the ProbeBOX 1.0)
5. Select your preferred calibration type.
(Either 1-Point Calibration or a 2-Point Calibration. A 3-Point-Calibration is not available for EC-probes. For the Pure Water Conductivity Electrode PL2SpEIECLRGL (Range 0-200 μ S/cm) you can only perform a 1-Point-Calibration with the reference solution 84 μ S/cm).

IMPORTANT: Conductivity standard solutions have no buffer.
Please avoid contamination of the solution. Before submerging the electrode in a standard solution, wash the electrode and allow it to dry. Important especially for the low range calibration solution 84 μ S/cm.

Always choose the conductivity solutions with values the closed to your expected measurement range as e.g. 84 μ S/cm solution or 1413 μ S/cm for the Low Conductivity Range, 12.88 mS/cm or 111.8 mS/cm solution for the High Range

1-Point-Calibration

- a) Select the calibration solution you intend to use (according to the above written notes) from the drop-down menu
- b) Rinse the electrode in purified water, allow it to dry, wash it with some reference solution and immerse in the reference solution.
Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles
- c) Tap on "Set Reference"

The device will calibrate now
Wait until „Calibrating“ will be replaced by „Done“
Depending on the temperature and the electrode, this may take some time (1 minute).
- d) Tap on "Save Calibration"

Continue...

EC-probe-calibration

2-Point-Calibration (low conductivity range)

a) Select „84 μ S/cm“ from the drop-down menu

b) Rinse the electrode in purified water, allow it to dry, wash it with some reference solution and immerse in the reference solution.

Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

c) Tap on "Set Reference 1"

The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

d) Tap on "Save Calibration"

e) Select „1413 μ S/cm“ from the drop-down menu

f) Rinse the electrode in purified water, allow it to dry, wash it with some reference solution and immerse in the reference solution.

Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

g) Tap on "Set Reference 2"

The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

h) Tap on "Save Calibration"

2-Point-Calibration (high conductivity range)

a) Select „12.88mS/cm“ from the drop-down menu

b) Rinse the electrode in purified water, allow it to dry, wash it with some reference solution and immerse in the reference solution.

Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

c) Tap on "Set Reference 1"

The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

d) Tap on "Save Calibration"

Continue...

EC-probe-calibration

e) Select „111.8 mS/cm“ from the drop-down menu

f) Rinse the electrode in purified water, allow it to dry, wash it with some reference solution and immerse in the reference solution.

Make sure that the electrode tip is dipped completely in the calibration solution and stir the tip of the electrode several times to release possible air bubbles

g) Tap on "Set Reference 2"


The device will calibrate now

Wait until „Calibrating“ will be replaced by „Done“

Depending on the temperature and the electrode, this may take some time (1 minute).

h) Tap on "Save Calibration"

Perform a Measurement

1. Connect the ProbeBOX 1.0 to the PrimeLab 2.0 via the USB-cable.
2. Connect an electrode to the ProbeBOX 1.0 via the 8 pin plug cable.
3. Go to the main menu on your PrimeLab 2.0 and tap on the "ProbeBOX 1.0" Icon. 
4. Make sure the electrode tip is completely covered in sample water.
Stir the tip of the electrode several times to release possible air bubbles.
5. Tap on "Start Measurement".
(If this option is not available you need to perform a calibration first – see page 6).
6. The device will start to measure automatically. The result is shown in the circle in the centre of your display.
7. Wait until the value shown on the display doesn't change anymore.
Depending on the temperature and the electrode, this may take some time (1 minute).
8. Tap on "Hold".
9. If you want to continue to measure, tap on "Resume".
If you want to save the measurement, tap on "Save".
10. A pop-up appears that allows you to match the result to an associated sampling point.
Tap outside of the pop-up if you want to cancel the process. Tap on "Save" if you want to save your data accordingly.



Notes - pH-probes

Electrode condition:

Verify if the Electrode was stored wet or dry

If the electrode has dried out, allow it to soak in tap water or 3 M KCl solution (EMKCL3Mbuf-500 - 500 ml) for 24 hours before performing measurements or calibrations.

Calibration interval:

For routine measurements, calibration should be done weekly.

For highest accuracy measurements, calibration is recommended before each test

If the temperature of the sample is > 5 °C from the temperature of the reference solution used in last calibration, a new calibration is recommended

When using the pH electrode in strong acidic ($\text{pH} < 2$) or strong basic ($\text{pH} > 12$) solutions, a more frequent calibration is recommended

Storage

pH electrodes can be stored "wet" in 3 M KCl solution or dry when not used for a longer period.

Never store electrodes in distilled water

Cleaning

If pH electrodes are used in strong polluted samples, the glass bulb and junction of the electrode need to be cleaned afterwards. Immerse the pH electrode for 1 hour in a suitable cleaning solution

Refilling pH electrodes

Refillable pH electrodes (PL2Sp-ElpHGLrefATC = WID pH Lab 324-1) can be refilled with fresh 3 M KCl solution (not necessary for all gel-filled pH electrodes).

Refilling process:

Check the electrolyte level of the refillable pH electrode regularly.

The electrolyte level of the refillable pH electrode should never exceed 1 cm below the filling hole.

Otherwise, the measurements can be erroneous (does not concern gel-filled electrodes).

If the electrolyte level is too low or if the electrolyte is polluted, open the filling whole and refill the electrode with the supplied 3 M KCl solution.

Immerse refilled pH electrodes for 1 hour or overnight in a 3 M KCl solution.

Keep the pH electrode in a vertical position during the relaxing period.

Perform a calibration after having changed the liquid electrolyte

Notes - ORP-probe

Electrode condition:

Verify if the Electrode was stored wet or dry

If the electrode was stored dry, immerse it in a suitable cleaning solution for 1 hour.

After the electrode has been used over a long period of time, the platinum surface will get polluted which causes inaccurate measurement and slow response. Immerse the ORP electrode for 30 minutes in a suitable cleaning solution. Then wash the electrode in distilled water and immerse it for 6 hours in a 3 M KCL solution.

Calibration interval:

ORP probes do not require calibration. If you are not sure about ORP probe quality or measuring value, use Water-I.D. ORP 468mV standard solution EMorpbu468-500, to check if the ORP electrode is still in good condition.

Storage:

ORP electrodes can be stored "wet" in 3 M KCl solution or dry when not used for a longer period.

Never store electrodes in distilled water

Cleaning:

If ORP electrodes are used in strong polluted samples, the glass bulb and junction of the electrode need to be cleaned afterwards. Immerse the ORP electrode for 1 hour in a suitable cleaning solution

Notes - EC-probes

Calibration interval:

For routine measurements, calibration should be done one time per month

If there is a large temperature deviation of the sample from the reference temperature (25°C) or if high accuracy of the measurements is needed, perform a calibration once a week.

Temperature compensation / coefficient

The default setting on PrimeLab 2.0 for the reference temperature is 25 °C

The temperature compensation coefficient on PrimeLab 2.0 is, per default, set to 2.0%/°C as this is the temperature coefficient of many aqueous solutions.

The conductivity temperature coefficient can be different for different solutions and concentrations. In the table you will find the temperature compensation coefficient that can be set on PrimeLab 2.0 for some special solutions.

You can find a drop-box-field on the measurement screen where you can select:

Temperature compensation coefficient of special solutions	Temperature compensation coefficient
No compensation	0.00 %/°C
Default	2.00 %/°C
NaCl solution	2.12 %/°C
5% NaOH solution	1.72 %/°C
Dilute ammonia solution	1.88 %/°C
10% hydrochloric acid solution	1.32 %/°C
5% sulfuric acid solution	0.96 %/°C

EC readings can be converted into TDS readings by a tick on the „EC“ or „TDS“ button on the measurement screen. You can also define the conversion factor (0.40 - 1.0 with 0.50 as the default setting). The reading will be saved under the selected unit (EC or TDS)

Single Electrodes

ProbeBOX electrodes are specially made for the ProbeBOX 1.0 and contain a controller inside the BNC-plug for easy identification by the PrimeLab 2.0 or the LabCOM App/Software. By that, it is not possible to connect any other, non-ProbeBOX electrode.

Single Electrodes for ProbeBOX

Item-Code*	Product Name	Temp. Rang	Range	Temp. Probe
PL2Sp-ElpHPCATC	WID pH Lab/Field 312-1	0 – 80 °C	(0 – 14) pH	NTC 30kΩ
PL2Sp-ElpHGLATC	WID pH Lab/Field 822-1	0 – 80 °C	(0 – 14) pH	NTC 30kΩ
PL2Sp-ElpHGLrefATC	WID pH Lab 324-1	0 – 100 °C	(0 – 14) pH	NTC 30kΩ
PL2Sp-ElORPPCATC	WID ORP Lab/Field 422-1	0 – 80 °C	±2000 mV	NO
PL2Sp-EIECLRGL	WID CON 361-01-1	0 – 80 °C	0 – 200 μS/cm	NTC 30kΩ
PL2Sp-EIECHRGLATC	WID CON 351-1-1	0 – 80 °C	0 – 200 mS/cm	NTC 30kΩ
PL2Sp-EIECLRPCATC	WID CON 341-1-1	0 – 50 °C	0 – 200 mS/cm	NTC 30kΩ
PL2Sp-EIECHRPCATC	WID CON 341-10-1	0 – 50 °C	20 – 2000 mS/cm	NTC 30kΩ



ProbeBOX kits

ProbeBOX kits

Item code	Parameter	Measurement range	Resolution	Temperature range	Kit contains
PL2Sp-ElpHPCATC-Kit	pH	pH 0 - 14	pH 0.01	0 – 80 °C ATC	<p>ProbeBOX 1.0 Electrode-Basic-Kit "pH":</p> <ul style="list-style-type: none"> • 1 x grey carrying case with foam insert • 1 x ProbeBOX 1.0 device • 1 x "PL2Sp-ElpHPCATC" Plastic Body pH Electrode. Designed for general water solutions, pH measurement in scientific research, environmental monitoring, and quality control. Ideal for both lab and in-field use. (Not suitable for strong base solution (pH>12), erosive solutions, or constant testing in high temperature (> 60 °C)). Non refillable. • 1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl-electrode soaking solution <p>Calibration solutions:</p> <ul style="list-style-type: none"> • 1 x "EMphbuf700-20" 20 ml "pH 7.00" • 1 x "EMphbuf400-20" 20 ml "pH 4.00" • 1 x "EMphbuf1000-20" 20 ml "pH 10.00" • 1 x "PL2Sp-PboxCable" USB-cable for ProbeBOX. 1 meter. Type-C / type-C • 1 x user manual
PL2Sp-ElpHGLATC-Kit	pH	pH 0 - 14	pH 0.01	0 – 80 °C ATC	<p>ProbeBOX 1.0 Electrode-Basic-Kit "pH":</p> <ul style="list-style-type: none"> • 1 x grey carrying case with foam insert • 1 x ProbeBOX 1.0 device • 1 x "PL2Sp-ElpHGLATC" Routine Sealed Glass Body pH Electrode. Designed for general water solutions, pH measurement in scientific research, environmental monitoring, and quality control. Ideal for both lab and in-field use. (Not suitable for strong base solution (pH > 12), erosive solutions, or constant testing in high temperature (> 60 °C)). Non refillable. • 1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl-electrode soaking solution <p>Calibration solutions:</p> <ul style="list-style-type: none"> • 1 x "EMphbuf700-20" 20 ml "pH 7.00" • 1 x "EMphbuf400-20" 20 ml "pH 4.00" • 1 x "EMphbuf1000-20" 20 ml "pH 10.00" • 1 x "PL2Sp-PboxCable" USB-cable for ProbeBOX. 1 meter. Type-C / type-C • 1 x user manual

Continue...

ProbeBOX kits

Item code	Parameter	Measurement range	Resolution	Temperature range	Kit contains
PL2Sp-ElpHGLref-Kit	pH	pH 0 - 14	pH 0.01	0 – 100 °C ATC	<p>ProbeBOX 1.0 El-Kit "pH-Glass Electrode":</p> <ul style="list-style-type: none"> • 1 x grey carrying case with foam insert • 1 x ProbeBOX 1.0 device • 1 x "PL2Sp-ElpHGLrefATC" Refillable Glass pH Electrode. Designed for general water solutions, TRIS Buffer compatible. Suitable applications: hydroponics, pools and spas, environmental monitoring, aquaculture, aquariums, education, general purpose labtest, body fluid, Tris Buffer, Beverage, Wine, Beer, Salt Water, High Temperature Solutions (up to 100 °C). • 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 • 1 x "PL2Sp-PboxCable" USB-cable for ProbeBOX. 1 meter. Type-C / type-C • 1 x user manual
PL2Sp-EIORPPCATC-Kit	ORP	±2000 mV	1 mV	0 – 80 °C	<p>ProbeBOX 1.0 Electrode-Basic-Kit "ORP":</p> <ul style="list-style-type: none"> • 1 x grey carrying case with foam insert • 1 x ProbeBOX 1.0 device • 1 x "PL2Sp-EIORPPCATC" Plastic Body ORP Electrode for faster respond. The gel inner reference solution does not need to be refilled. This electrode is designed for testing in general water solutions both in-lab or in-field. Comes with Φ 0,8*3 mm platinum disc. • 1 x "PL2Sp-KCl3mol-10" dropper bottle with 10ml KCl-electrode soaking solution • 1 x "EMorpbuf468-20" 20ml "ORP +468mV" calibration solution • 1 x "PL2Sp-PboxCable" USB-cable for ProbeBOX. 1 meter. Type-C / type-C • 1 x user manual

Continue...

ProbeBOX kits

Item code	Parameter	Measurement range	Resolution	Temperature range	Kit contains
PL2Sp-EIECLRPCATC-Kit	EC	0 – 200 mS/cm	1 μ S/cm	0 – 50 °C	<p>ProbeBOX 1.0 Electrode-Basic-Kit "EC":</p> <ul style="list-style-type: none"> • 1 x Grey carrying case with foam insert • 1 x ProbeBOX 1.0 device • 1 x "PL2Sp-EIECLRPCATC" Plastic Body – Conductivity Electrode. Designed for high accuracy in a wide range of conductivity measurements (0 to 200 mS/cm), (K = 1.0). • 1 x "EMecbuf1413-20" 20ml "EC 1413 μS/cm" calibration solution • 1 x "EMecbuf1288-20" 20ml "EC 12.88 mS/cm" (KCl 0.1 mol/l) calibration solution • 1 x "PL2Sp-PboxCable" USB-cable for ProbeBOX, 1 meter, Type-C / type-C • 1 x user manual
PL2Sp-EIECLRGL-Kit	EC	0 – 200 mS/cm	1 μ S/cm	0 – 80 °C ATC	<p>ProbeBOX 1.0 El.-K. "Purif. Water EC Pro.":</p> <ul style="list-style-type: none"> • 1 x Grey carrying case with foam insert • 1 x ProbeBOX 1.0 device • 1 x "PL2Sp-EIECLRGL" Glass Body – Pure Water Conductivity Electrode (K = 0.1) Designed for purified water and ultra-pure water conductivity measurements. Electrode size: 7x18 mm platinum. • 1 x "EMecbuf84-100" 100ml "EC 84 μS/cm" calibration solution • 1 x "PL2Sp-PboxCable" USB-cable for ProbeBOX, 1 meter, Type-C / type-C • 1 x user manual
PL2Sp-EIECHRGLATC-Kit	EC	0 – 200 mS/cm	1 μ S/cm	0 – 80 °C ATC	<p>ProbeBOX 1.0 El.-Kit "Glass EC Probe":</p> <ul style="list-style-type: none"> • 1 x Grey carrying case with foam insert • 1 x ProbeBOX 1.0 device • 1 x "PL2Sp-EIECHRGLATC" Glass Body – Conductivity Electrode (K=1.0). Designed for high-accuracy laboratory conductivity measurements. Its cavity structure and platinum chip sensor design enhance the accuracy and stability of conductivity measurement in the range of 0 to 200mS/cm. The glass body is resistant to all kinds of general chemical corrosion. Electrode size: 5*7 mm platinum plate/ 2 pole. • 1 x "EMecbuf1413-20" 20ml "EC 1413 μS/cm" calibration solution • 1 x "EMecbuf1288-20" 20ml "EC 12.88 mS/cm" (KCl 0.1 mol/l) cal. sol. • 1 x "PL2Sp-PboxCable" USB-cable for ProbeBOX, 1 meter, Type-C / type-C • 1 x user manual

Continue...

ProbeBOX kits

Item code	Parameter	Measurement range	Resolution	Temperature range	Kit contains
PL2Sp-EIECHRPCATC-Kit	EC	20 – 2000 mS/cm	1 μ S/cm	0 – 50 °C ATC	<p>ProbeBOX 1.0 EI-Kit "High Range EC Probe":</p> <ul style="list-style-type: none"> • 1 x Grey carrying case with foam insert • 1 x ProbeBOX 1.0 device • 1 x "PL2Sp-EIECHRPCATC" Plastic Body – Conductivity Electrode, Designed for high-range (K = 10)conductivity measurement . Electrode size: 5*5 mm platinum ring/ 2 pole. • 1 x "EMecbuf1413-20" 20ml "EC 1413 μS/cm" calibration solution • 1 x "EMecbuf1288-20" 20ml "EC 12.88 mS/cm" (KCl 0,1 mol/l) calibration solution • 1 x "PL2Sp-PboxCable" USB-cable for ProbeBOX, 1 meter, Type-C / type-C • 1 x user manual

Calibration-/Electrode Solutions

Calibration solutions

Code	Product Description	20ml	100ml	250ml	500ml	1000ml	10 l
EMpHbuf400	"pH 4.00" cal. solution	•	•		•	•	•
EMpHbuf700	"pH 7.00" cal. solution	•	•		•	•	•
EMpHbuf1000	"pH 10.00" cal. solution	•	•		•	•	•
EMecbuf1413	"EC 1413 $\mu\text{S}/\text{cm}$ " cal. solution	•	•		•	•	•
EMecbuf1288	"EC 12.88 mS/cm " (KCl 0.1 mol/l) cal. sol.	•	•		•	•	•
EMorpbuf468	"ORP +468mV" cal. solution	•	•		•	•	•

More calibration solutions available / on request

Electrode solutions

Code	Product Description	500ml	1000ml	10 l
EMKCL3Mbuf-500	Electrolyte-Solution "KCl 3 mol/l"		•	•

More electrode solutions available / on request

Accessories

ProbeBOX accessories

Code	Product Description
PI2Sp-Pbox	ProbeBOX 1.0 (device) A/D-switch-box with BNC-IN and USB-Type-C-OUT to connect all electronic probes to PrimeLab 2.0 and/or LabCOM App/Software
PL2Sp-Probe-Holder	ProbeBOX 1.0 Electrode-holder For 3 electrodes (16mm), with cable duct. Additional opening for temperature sensor. Three joints for high flexibility and adjustment options.
PL2Sp-Probe-Stirrer	Magnetic-stirrer For stirring quantities up to 1 litre. Infinitely variable speed from 0 - 2500 rpm. White top plate suitable for observing colour reactions. 110/220 V power supply with plugs for EU/CH/UK/USA
PL2Sp-PboxCable	USB-cable for ProbeBOX 1.0 1 meter. Type-C / type-C

Technical Data



Dimensions	104 mm x 60 mm x 29.2 mm (H)
Operating temperature	5 – 45°C
Input and output voltage	5 V
IP protection class	IPX5 waterproof

Developed in Germany and Turkey, assembled in PRC

Certification

FCC:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



ICES:

This device complies CAN ICES-003(B) / NMB-003(B)



CE:

According to the EMC Directive 2014/30/EU

The manufacturer:

EDA

No 6, Ma an 2nd Road, Chashan Town, Dongguan City, Guanddong Province.China.

ElectroMagnetic Compatibility (EMC) standards:

EN 55032:2015/A11:2020

EN 55035:2017/A11:2020



UKCA:

According to the Electromagnetic Compatibility Regulations 2016 (S.I. 2016/1091)

The manufacturer:

EDA

No 6, Ma an 2nd Road, Chashan Town, Dongguan City, Guanddong Province.China.

ElectroMagnetic Compatibility (EMC) standards:

BS EN 55032:2015+A11:2020

BS EN 55035:2017+A11:2020



Disposal

Device

According to EC Directive 2002/ 96/EC, electronic devices must not be disposed of in normal domestic waste. The manufacturer of this device,

Water-i.d.® GmbH, Daimlerstr. 20, D-76344 Eggenstein

will dispose of your ProbeBOX 1.0 free of charge (not including costs of sending the device to us). Send your ProbeBOX 1.0 for disposal-freight prepaid - to the address shown above.

Disposal and recycling information

The crossed-out wheeled-bin symbol on your product, battery, literature or packaging reminds you that all electronic products and batteries must be taken to separate waste collection points at the end of their working lives; they must not be disposed of in the normal waste stream with household garbage. It is the responsibility of the user to dispose of the equipment using a designated collection point or service for separate recycling of waste electrical and electronic equipment (WEEE) and batteries according to local laws. Proper collection and recycling of your equipment helps ensure electrical and electronic equipment (EEE) waste is recycled in a manner that conserves valuable materials and protects human health and the environment, improper handling, accidental breakage, damage, and/or improper recycling at the end of its life may be harmful for health and environment. For more information about where and how to drop off your EEE waste, please contact your local authorities, retailer or household waste disposal service.



Certificate of Compliance

We hereby certify that the device

ProbeBOX 1.0

With it's serial number as stated below,
has passed intensive visual and technical checks
as part of our QM documentation. We confirm
the device got factory-calibrated.

Water-i.d.[®] GmbH (Germany)

Andreas Hock, Managing Director
Water-i.d.[®] GmbH | Daimlerstr. 20
76344 Eggenstein | Germany



S/N
Manufacturing date

Water-i.d.[®] is certified according to ISO 9001:2015