



- Familiar Android tablet platform
- Live display of single and multiple pH electrodes with one tablet
- Uses any standard pH electrode with an S7 Connector
- Visible calibration information
- Easy data storage and sharing
- Warning alerts and alarms
- Stores up to 10,000 readings
- Automated fault diagnosis
- Electrode health reminder



anywhere  patented system

#### Product Ordering Information



**SMART Cap (with TRUEscience combination pH electrode double junction)**  
SMART Cap with TRUEscience combination double junction pH electrode/ Soaker bottle  
Lithium battery, Spare battery covers colour coded (Set of 3)



**SMART Cap (without pH electrode)**  
SMART Cap (no pH electrode supplied)  
Lithium battery, Spare battery covers colour coded (Set of 3)



**SMART Cap Complete pH meter Kit**  
SMART Cap with TRUEscience combination double junction pH electrode/ Soaker bottle  
USB Port charger Stand for TRUEscience tablet, Bluetooth® enabled Android tablet 7" / 8"  
Storage Stand, TRUEscience QR buffers 250ml pH 4, 7 & 10, Spare battery covers colour coded x 3, Lithium battery



**SMART Cap pH Meter Kit (without pH electrode)**  
SMART Cap (no pH electrode supplied), USB Port charger Stand for TRUEscience tablet  
Bluetooth® enabled Android tablet 7" / 8" Storage Stand, TRUEscience QR buffers 250ml pH 4, 7 & 10  
Spare battery covers colour coded x 3, Lithium battery



#### TRUEscience pH electrode:

Combination pH electrode glass with S7 connector  
Combination pH electrode double junction flat with S7 connector  
Combination pH electrode double junction epoxy with S7 connector

#### Accessories:

Replacement Lithium battery for SMART Cap  
Spare battery covers colour coded Grey, Teal, Red (Set of 3)  
Spare battery covers colour coded White, Teal, Red (Set of 3)  
Tablet 7" / 8" Bluetooth® enabled Android  
Storage Stand (includes storage tubes)  
Spare storage tubes for storage stand  
Charging tablet stand includes USB Cable  
Height adjustable tablet stand, Stainless steel, non-charging  
Replacement SMART Clip

Buffer solution pH 4.00 ± 0.01 @ 20°C Red  
Buffer solution pH 7.00 ± 0.01 @ 20°C Yellow  
Buffer solution pH 10.00 ± 0.01 @ 20°C Blue

250ml	500ml	1000ml
1201459	1144885	1144887
1201458	1144955	1144960
1201460	1145008	1145011

Made in the UK



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info@truescience.co.uk

V1.0/2016



#### Order Code

1201690 (White)  
1201822 (Grey)

1201689 (White)  
1201821 (Grey)

1201691 (White)  
1201823 (Grey)

1201692 (White)  
1201824 (Grey)

1201575  
1201574  
1201711

1201564  
1201710  
1201813  
1201708  
1201695  
1201696  
1201562  
1201563  
1201698



making  
pH measurement  
SMART



**The TRUEpH SMART Cap from TRUEscience™** is the world's first laboratory Bluetooth® pH meter and QR buffer system that harnesses the accuracy of standard laboratory grade sensors with the computing power of an Android tablet, expanding measurement capabilities, connecting to the cloud and making your readings SMART.

**Technological Innovation**  
The TRUEscience system offers advanced features which would usually only be seen in more expensive benchtop pH meters such as logging, data storage, multiple electrode connection, alarms and user management at an affordable price.

**Connected -**  
Using low energy Bluetooth® 4.0, the electrode communicates results wirelessly to the tablet in real time. This eliminates cables which can limit truly flexible testing in the field or on-site. Up to 6 SMART Caps can communicate with one tablet at a time, making measurement of different tests or site locations easy.

**Credible -**  
The unique QR buffer system means you always have full traceability on calibrations. See a full history of who has calibrated, which buffers were used and what the results were at any time. Get MSDS and Certificates of Analysis for all reagents straight from the TRUEscience App for simple health and safety and quality checks.

**Accessible -**  
The truly open system lets you use any standard electrode with an S7 connector. As well as removing the need to replace the whole unit every time, this means you can also select an electrode which is specialised for your application, like a spear tip or a flat ended electrode.

Whether you're controlling product quality, testing your site discharge for environmental compliance, checking up on your research in the lab or teaching the next generation of Scientists, you can now measure pH the SMART way.

making  
measurement  
SMART

## Accessible

**6 meters in 1** Choose between one large single screen meter or simultaneously view the readings of up to 6 SMART Caps at once on a single tablet.



**Measure Anywhere** Totally portable and with an effective range of up to 50 meters you are now free to take pH measurements easily from more locations than ever before.



**Logging** The SMART Cap can log data continuously and independently of the tablet and can store up to 10,000 readings before needing to download. The LED flashing indicator lets you see at a glance whether the unit is taking a reading or logging.



**Open Electrode System** There are three TRUEscience pH electrodes to choose from including glass, epoxy double junction and flat or you can use any other standard pH electrode with an S7 connector.



**WireFree and StandFree** Using TRUEpH is easy. There are no wires or cumbersome retort stands and you simply clip your Cap to the side of beakers and tubes or rest it on the Storage Stand.



**Traceability** The innovative QR buffer system automatically loads batch info, expiry date and re-order info into the App and even allows you to access MSDS sheets and batch calibration certificates for each buffer used.

## Credible



**Full Calibration Suite**  
Not only does the TRUEpH meter tell you when it was last calibrated, it keeps a full calibration history by user and alerts you to recalibrate using its simple step by step process at intervals you control. It will even alert you if your buffers have expired.



**Cost Effective** TRUEpH offers a real practical solution with the performance and accuracy (2 decimal places) you would expect of any serious scientific lab meter at a fraction of the cost. Using the free TRUEscience App from GooglePlay allows you to calibrate, measure, log and more on a standard Android tablet.



**Logging**  
View your logged data as a table and as a graph within the tablet, or easily export and send the data in .csv format.

**Store and Share Enriched Readings**  
The app can store multiple results by user and allows you to add date, time, image, notes & GPS location tags. You can then share your results by email, Dropbox or GoogleDrive in standard .csv format for spreadsheet analysis or input to LIMS.



## Connected

**Alarms and Email Alerts**  
Using the power of the Android you can configure alarms at set pH values and be alerted immediately on the tablet as soon as the reading is outside the set limits or by email.



**Consumables Re-ordering**  
Re-order consumables directly on your tablet through any TRUEscience registered outlet. You need never run out of calibration buffers and storage solution.

**Long Battery Life** The TRUEpH Cap has been designed to run for a year on a single battery in normal use or for 6 months when continuous logging.



**Perfectly Conditioned** The unique TRUEscience Storage Stand is the perfect resting place for your electrode keeping the membrane ready to use with minimal solution waste.

Ideal  
Storage!

## TECHNICAL SPECIFICATION

pH Range	0-14 pH units
Resolution	0.01pH, 0.1mV, 0.1°C
Meter Accuracy	±0.002
Calibration points	up to 5 points
Buffer Recognition	QR Code input
Automatic temperature compensation	0°C - 100.0°C
pH Electrode (where included)	Epoxy double junction combination pH
Electrode accuracy	±0.02pH
Electrode diagnostics	Yes
mV range	±1000mV
mV accuracy	±0.1mV
Temperature accuracy	±0.5°C
Store values	10,000 measurements/log
Battery Life	1 year normal use
Battery Type	1/2 AA Lithium Thionyl Chloride, 3.6V, 1200mA
Tablet and App requirements	See below or specified list of tested models on our website
Dimensions of Cap	L218 x W48 x D24 mm including temperature probe
Temperature probe length	130mm long
Weight	91.5 g
Operating/Storage Temperature	0-55°C
Calibration Certainty	Yes, App indicates calibration status, time and date
Electrode health reminders	Yes
Colour keyed battery covers	Yes
Multiple Cap Measurements	Yes, up to 6 simultaneously
Consumables ordering online	Yes
Any S7 connector pH electrode	Yes
Interval logging	Yes

### Tablet Requirements:

The TRUEscience App has been optimised for use with 7 and 8 inch screen Android tablets. The tablet must have Bluetooth® 4.0 or later and Android 5.0 or later operating system. You will require a wifi connection for data sharing and full App functionality. The App will run in the background and will require access to GPS, Camera, Bluetooth® and sharing Apps such as Gmail, Dropbox and GoogleDrive.

EN61236-1: 2006 - Annex A 2008: 1999/5/EC Annex III  
Electrostatic discharge may cause the unit to power off

The Bluetooth® transceiver device meets the requirements for modular transmitter approval as detailed in FCC public notice DA00-1407



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