

TRUEscience ION

Ion Selective Electrode



TRUEscience SMART Cap for ISE/ION

The TRUEscience SMART ISE/ION Cap utilises the same technology that can be found in the SMART pH Cap. TRUEscience have developed a range of Ion selective electrodes that are interchangeable on the TRUEscience platform which includes the SMART Cap and the TRUEscience App. The App works on both Android tablet and smart phone that are bluetooth enabled.

TRUEscience Ion Selective Electrodes (ISE) are rugged solid state sensors with built in Teflon double junction reference half cells that do not require filling solutions, membrane replacements or operator maintenance.

These combination ISEs can be stored dry. The solid state sensor and maintenance free reference makes these electrodes ideal for both laboratory and field work. The solid state sensors have a huge advantage over conventional ISEs in that there is no internal fill solution to degenerate the sensors. This means that TRUEscience combination ISEs have an unrivalled lifetime and a very low cost of ownership.

TRUEscience ION electrodes are manufactured in the UK to the highest standards and a complete range of starter kits, standards and ISAB buffers are available.

How does it work?

Ion Selective electrodes work in the same way as standard pH electrodes. When the sensing electrode comes into contact with the ion being measured a potential is created across the sensitive membrane. This potential is proportional to the ion concentration. When measured against the built in stable reference half-cell the electrodes overall potential difference in mV is recorded by the TRUEscience cap and, upon calibration, is converted to concentration units as required.

ISEs have a variety of constructions. The sensors can be Crystalline, PVC or pellets of mixed insoluble compounds. As a result, unlike pH electrodes can be left dry.



Features

- Solid State ION electrodes
- Multiple ION testing
- Monitor anywhere
- Accurate results
- Works with any Android Tablet or phone (bluetooth enabled)

Applications:

- Wastewater
- Industrial
- Fluoridation
- Soil analysis
- Cosmetics
- Pool & Spa
- Ponds & Aquariums



Ordering Information

TRUEscience SMART Cap* (available in White or Grey)

WHITE SMART CAP Order Code 1201689



Item No	Item Description
TRUEscience Ammonia	
1208268	Starter kit for Ammonia NH ₃ with replaceable membranes
1140988	Ion selective electrode for Ammonia NH ₃ with S7
1201353	ISE calibration solution for Ammonia 1000ppm 500ml
1208250	ISAB solution for Ammonia ISE electrode 500ml
TRUEscience Ammonium	
1208260	ISE starter kit for Ammonium NH ₄ ⁺
1140989	Ion selective electrode for Ammonium NH ₄ ⁺ S7
1140964	ISE calibration solution for Ammonium 1000ppm 500ml
1140971	ISAB solution for Ammonium ISE electrode 500ml
TRUEscience Barium	
1140990	Ion selective electrode for Barium Ba ++ S7
1208247	ISE calibration solution for Barium 1000ppm 500ml
1208251	ISAB solution for Barium ISE electrode 500ml
TRUEscience Bromide	
1208263	ISE starter kit for Bromide Br -
1140991	Ion selective electrode for Bromide Br - S7
1160483	ISE calibration solution for Bromide 1000ppm 500ml
1208252	ISAB solution for Bromide ISE electrode 500ml
TRUEscience Calcium	
1208259	ISE starter kit for Calcium Ca ⁺⁺
1140993	Ion selective electrode for Calcium Ca ⁺⁺ S7
1140965	ISE calibration solution for Calcium 1000ppm 500ml
1140972	ISAB solution for Calcium ISE electrode 500ml
TRUEscience Carbonate	
1140994	Ion selective electrode for Carbonate CO ₃ ⁻ S7
TRUEscience Chloride	
1208262	ISE starter kit for Chloride Cl-
1140995	Ion selective electrode for Chloride Cl- S7
1140966	ISE calibration solution for Chloride 1000ppm 500ml
1140973	ISAB solution for Chloride ISE electrode 500ml
TRUEscience Cupric/Copper	
1208265	ISE starter kit for Cupric Cu ⁺⁺
1140996	Ion selective electrode for Cupric Cu ⁺⁺ S7
1208248	ISE calibration solution for Copper 1000ppm 500ml
1208253	ISAB solution for Copper ISE electrode 500ml

GREY SMART CAP Order Code 1201821



Item No	Item Description
TRUEscience Fluoride	
1208261	ISE starter kit for Fluoride F-
1140998	Ion selective electrode for Fluoride F- S7
1140967	ISE calibration solution for Fluoride 1000ppm 500ml
1140974	ISAB solution for Fluoride ISE electrode 500ml
TRUEscience Iodide	
1208264	ISE starter kit for Iodide I-
1141001	Ion selective electrode for Iodide I- S7
1160481	ISE calibration solution for Iodide 1000ppm 500ml
1208254	ISAB solution for Iodide ISE electrode 500ml
TRUEscience Nitrate	
1208257	ISE starter kit for Nitrate NO ₃
1141005	Ion selective electrode for Nitrate NO ₃ S7
1140968	ISE calibration solution for Nitrate 1000ppm 500ml
1140975	ISAB solution for Nitrate ISE electrode 500ml
TRUEscience Nitrite	
1141006	Ion selective electrode for Nitrite NO ₂ - S7
TRUEscience Potassium	
1208258	ISE starter kit for Potassium K ⁺
1140969	ISE calibration solution for Potassium 1000ppm 500ml
1208684	ISAB solution for Potassium ISE electrode 500ml
TRUEscience Silver	
1141009	Ion selective electrode for Silver Ag ⁺ S7
1160484	ISE calibration solution for Silver 1000ppm 500ml
1208255	ISAB solution for Silver ISE electrode 500ml
TRUEscience Sodium	
1208267	ISE starter kit for Sodium Na ⁺
1141010	Ion selective electrode for Sodium Na ⁺ S7
1140970	ISE calibration solution for Sodium 1000ppm 500ml
1140977	ISAB solution for Sodium ISE electrode 500ml
TRUEscience Water Hardness	
1208266	ISE starter kit for Water Hardness
1141013	Ion selective electrode for Water Hardness S7
1208249	ISE calibration solution for Water Hardness 1000ppm
1208256	ISAB solution for Water Hardness ISE electrode 500ml

* This SMART Cap is suitable for:
pH, DO, REDOX & ION



Made in the UK



Distributed by:
Camlab Ltd
24 Norman Way Industrial Estate
Over
Cams
CB24 5WE
P: +44 (0)1954233100
F: +44 (0)1954233101

sales@camlab.co.uk
www.camlab.co.uk

www.true-science.co.uk