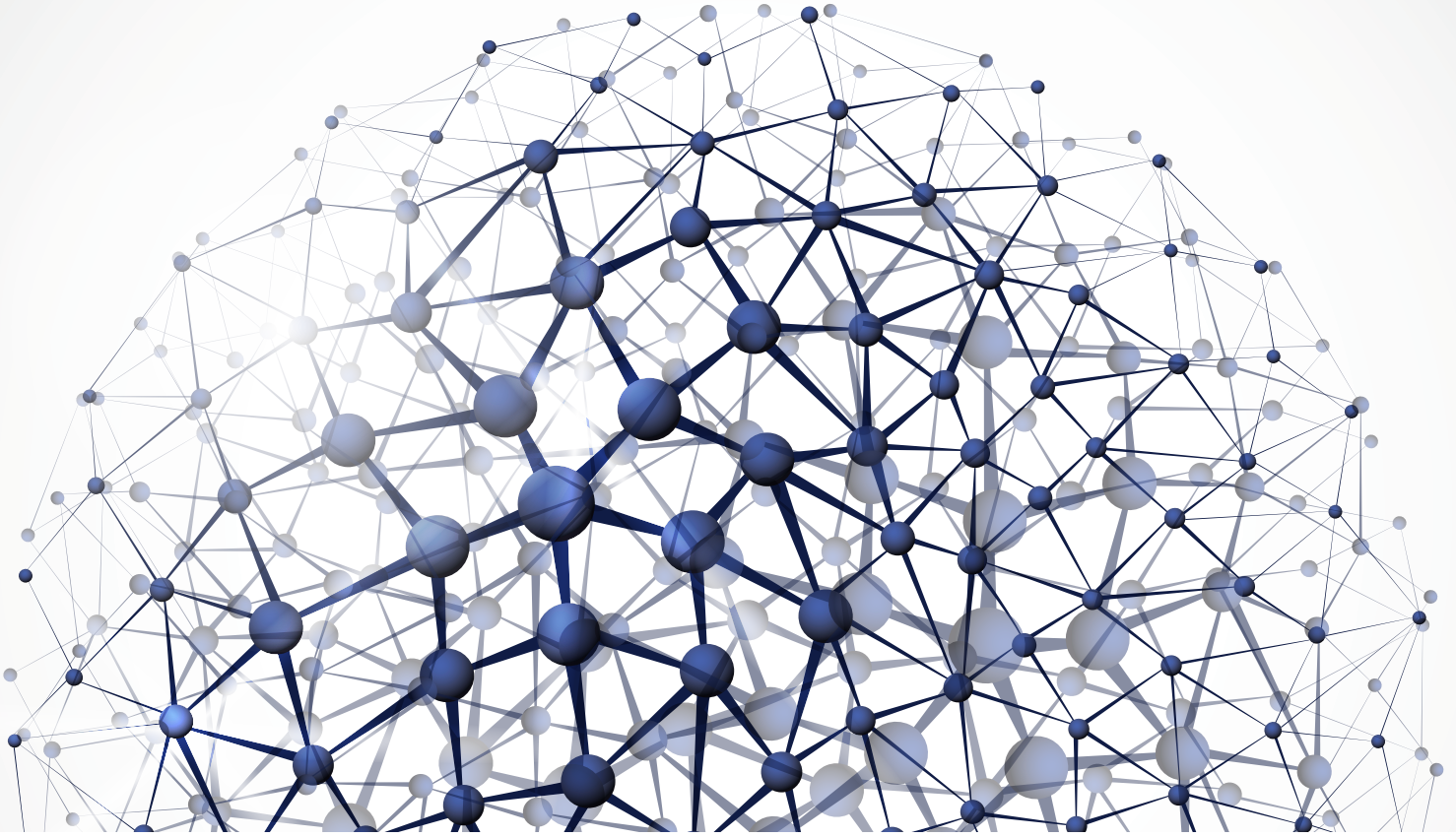


TRANS INSTRUMENTS
for the professionals



SCIENTIFIC

Quality control of pH, conductivity, DO in manufacturing and production of all water related industry requires good and reliable instrumentation.

Trans Instruments offers a range of precision pocket testers and handheld meters for full portability as well as dedicated Bench Meters.

The pocket testers are rugged and durable, yet maintaining the accuracy needed for the job.

The handheld and bench top meters offer highest precision for the more demanding controls.

There is always a meter that suits for each application in waste disposal, chemical food processing, printing, paper production and pool management.



Senz Series

The Senz series testers are specially designed for quick and reliable on-site testing. The tester are made to withstand drop-shocks, splash and even float on water. Its ruggedness make it the most suitable tester for on-site testing as well as secondary assurance check against online meters.

Senz pH and conductivity testers comes with an auto-lock/auto-endpoint function which assures accurate calibration and readings all the time.

pH & Redox Testing

pH is the measurement of acidity and alkalinity of water. The reading of pH7 is neutral, a reading higher than 7 is alkaline and lower is acidic.

pH measurement is widely used in all industries where water quality control is needed. Depending on the accuracy and resolution, temperature compensation is employed to ensure accuracy of the pH glass sensor. Display resolution of 0.1pH generally do not require temperature compensation as the error is negligible.

Oxidation Reduction Potential (ORP) or Redox in short is the measurement of ion activity in a solution.

When an atom gain or loose an oxygen electron, a minute voltage is register. Redox is measured in the unit of mili-volts (mV), where positive reading represents the solution that is active and has strong oxidising power. Redox is volatile. Therefore, Redox should be measured as a trend by charting results over a period to time.



Senz pH

Most preferred pH tester for general purpose



Senz pH Duo

Allows measurement of both temperature and pH levels of the liquid in a single test.



Senz pH Pro

High accuracy with 2-point calibration with 0.01 resolution.



Senz Redox

General purpose tester for measurement of Oxidation Reduction Potential (ORP)



Uni pH Testa

3-in-1 function tester that measures pH, temperature and mV. Hot swap with Redox sensor (optional) to measure ORP.

Order Code	Product	Measuring Range	Resolution	Accuracy	Calibration Point	Temperature Compensation	Battery Type
TP9050	Senz pH	0 to 14pH	0.1pH	±0.2pH	Single	n.a.	4 x 1.5V Button Cell
TP9051	Senz pH Duo	0 to 14pH, 0 to 50°C	0.1pH, 0.1°C	±0.2pH, ±0.5°C	Single	n.a.	4 x 1.5V Button Cell
TP9052	Senz pH Pro	0 to 14pH	0.01pH	±0.05pH	2 point	Automatic	4 x 1.5V Button Cell
TO9057	Senz Redox	+999 to -999mV	1mV	±40mV	Single	Automatic	4 x 1.5V Button Cell
TP2011	Uni-pH Testa	2 to 12pH ±999mV 0 to 90°C	0.01pH 1mV 0.1°C	±0.02pH ±3mV ±0.2°C	3 point	Automatic	DC1.5V x 4 battery (UM-4/AAA)

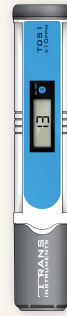
Basic pH & Conductivity Series

Trans Instruments also offers a basic range of pocket testers. The AquaPal testers are simple to use, economical, accurate and reliable; it retains the conventional trimmer calibration.



pH Pal

Basic and affordable pH tester.



TDS1

Basic TDS meter for the measurement of municipal and drinking water in ppm.

TDS2

Basic TDS meter for measurement of high concentrates in ppm

Cond3

Basic conductivity meter for measurement of municipal and drinking water in μ Siemen

Cond4

Basic conductivity meter for measurement of concentrates

Order Code	Product	Measuring Range	Resolution	Accuracy	Temperature Compensation	Battery Type
TP9058	pH PAL	0 to 14pH	0.1 pH	± 0.2 pH	n.a.	4 x 1.5V Button Cell
TC9059	TDS1	0 to 1990ppm	10ppm	$\pm 2\%$ of full scale	Automatic	4 x 1.5V Button Cell
TC9060	TDS2	100 to 10000ppm	100ppm	$\pm 2\%$ of full scale	Automatic	4 x 1.5V Button Cell
TC9061	COND3	10 to 1990 μ S	10 μ S	$\pm 2\%$ of full scale	Automatic	4 x 1.5V Button Cell
TC9056	COND4	100 to 19900 μ S	100 μ S	$\pm 2\%$ of full scale	Automatic	4 x 1.5V Button Cell

Senz Conductivity Series

Conductivity is the measure of liquid concentrations. They are expressed in μ Siemens or mSiemen, where 1 mSiemen = 1,000 μ Siemen. Conductivity readings are widely used for gauging mixture concentrations and chemical compound. It does not measure specific salts but the total combine salts in the liquid, making it a fast, simple and non-destructive test.

Conductivity is also expressed in TDS (Total Dissolved Solid), and the unit of measurement is in ppm (1 milli-gram of solid dissolved in 1 litre of water).

The conversion factor for TDS varies for each type of chemical. In municipal water measurement, a factor of 0.5 is generally used to convert readings from conductivity, where 1 ppm equal to 2 μ Siemen.



Senz TDS

General purpose TDS meter for most common application with precise display of 1ppm.



Senz TDS2

Designed for liquid testing where high concentrations of below 10,000ppm are measured.



Senz μ Siemens

Tester to measure water concentrations in precise display of 1 μ S



Senz mSiemens

Tester to measure high water concentrations in precise display of 0.1mS

Order Code	Product	Measuring Range	Resolution	Accuracy	Calibration Point	Temperature Compensation	Battery Type
TC9053	Senz TDS	0 to 1990ppm	1ppm	$\pm 2\%$ of full scale	Single	Automatic	4 x 1.5V Button Cell
TC9054	Senz TDS2	100 to 10000ppm	100ppm	$\pm 2\%$ of full scale	Single	Automatic	4 x 1.5V Button Cell
TC9055	Senz μ Siemens	0 to 1999 μ S	1 μ S	$\pm 2\%$ of full scale	Single	Automatic	4 x 1.5V Button Cell
TC9056	Senz mSiemens	0 to 19.9mS	0.1mS	$\pm 2\%$ of full scale	Single	Automatic	4 x 1.5V Button Cell

Assurance of quality made easy with the use of Trans Instruments new portable meter with remarkably sleek design which enhances the sophistication of laboratory instruments. The wide and long display comes with backlight and the simple navigate buttons make measurement a breeze. Fully customizable to increase accuracy and ease of use. Meter stores up to 99 memory with date and time.



WalkLAB pH Meter HP9010

- A triple-function meter pH, mV/ORP and temperature
- Auto-lock / auto-end point reading
- 99 data memory with Real time clock and data
- Up to 5 point calibration with NIST, ISO or custom standard
- PC link ready (Optional USB cable required)



WalkLAB Conductivity Meter HC 9021

- Auto-range range conductivity meter
- Auto-lock / auto-end point reading
- Able to display reading in TDS and salinity
- Adjustable TDS factor
- 99 data memory with real time clock and date
- PC link ready (Optional USB cable required)

Order Code	Product	Measuring Range	Resolution	Accuracy	Calibration	Battery Type	Other Parameters
HP9010	WalkLAB HP9010	-2.00 to 16.00 pH ±700.0mV / 2000mV(Auto Range) 0 to 120 °C	0.01 pH 0.1mV / 1mV 0.1 °C	±0.02 pH ±0.5mV / ±2mV ±0.5 °C with class A PT1000 thermistor	Min 2 points & Max 5 points	4 x AAA Batteries	Offset Recognition : ±70mV at pH7 Slope 70% to 130% at pH 4 and pH10 Electrode status in percentage of slope
HC9021	WalkLAB HC9021	0 to 199.9mS (auto range) 0 to 100ppt 0 to 100°C	0.01/0.1/1µS 0.01/0.1mS 0.1ppt 0.1°C	±1% full scale ±0.5 °C with class A PT1000 thermistor	5 point with 1 point on each range	4 x AAA Batteries	Allow adjustment of TDS factor 0.40 to 1.00 Allow use of probe cell constant 0.1, 1.0, 10

Portable Handheld meters

The portable meters designed for full portability. All meters comes complete in a carrying bag. With all necessary calibration fluid, sensor and accessories all kept into one. Truly a meter on the Go!



WalkLAB pH Meter HP9000

- 3-in-1 function: pH, mV & temperature
- Simultaneous pH-temperature display
- Auto-lock feature
- One touch auto-calibration for easy two-point calibration
- Auto shut-off to conserve battery consumption



WalkLAB Dissolved Oxygen Meter HD9030

- For measuring of dissolved oxygen in water
- Easy calibration in air
- Simple to use
- Optional 3 or 5 meters probe cable available



Portable Dissolved Oxygen Meter HD3030

- Simultaneous display of DO & temperature
- Automatic Salinity compensation setting
- Automatic Altitude compensation setting
- 99 data memory with Real time clock & date
- Computer link with optional USB cable and software kit
- Button activated back-light display

Order Code	Product	Measuring Range	Resolution	Accuracy	Temperature Compensation	Battery Type	Other Parameters
HP9000	WalkLAB pH meter	0 to 14pH ±999mV 0 to 100°C	0.01pH 1mV 0.1°C	±0.01pH ±1mV ±0.5°C	Automatic or manual from 0°C to 100°C	DC 9 volt (1604A, 6LF22 or equivalent)	Input Impedance : 1012 ohm Offset Recognition : ±60mV at pH7 Slope: ±20% at pH 4 and pH 10
HD9030	WalkLAB Dissolved Oxygen Meter	0 to 20.0ppm(mg/L)	0.1ppm(mg/L)	±0.4ppm(mg/L)	0 to 40°C	DC 9 volt (1604A, 6LF22 or equivalent)	Manual zero adjustment Manual Calibration with probe in air @20.9%
HD3030	Professional Dissolved Oxygen Meter	0.0 -199.9% 0.00 -19.99ppm 0 to 50°C	0.1% 0.01ppm 0.1°C	±1.5% full scale ±0.3ppm ±0.3°C	0 to 50°C	4 x AAA Batteries	SalinityAdjustment (0 to 50.0ppt) Pressure Adjustment (500 to 1499mmHg)

Light Series

Light measurement are mostly neglected because our eyes are adaptable to various lighting conditions. We can only perceive vast difference only when we change a light bulb. These degradation in lighting fixtures can often reduce our working productivity, causes eye stress.

For plants which relies on photosynthesis to create food are all the more demanding on the sufficiency of light intensity. Therefore, regular checks on lighting fixture at our work place or artificial lighting for plants is a necessity. Prevention is better than cure!



Litecheck

Litecheck is the simplest pocket size light intensity meter



WalkLAB Lux Meter HL9040

Professional Lux Meter is portable and easy to use. Remote sensor allows measurement in all angle.

Order Code	Product	Measuring Range	Resolution	Accuracy	Battery Type
TL9080	Litecheck	0 to 50,000 Lux 0 to 5000 fc	100 Lux 10 fc	±8% of full scale	4 x 1.5V Button Cell
HL9040	WalkLAB Lux Meter	0 to 50,000 Lux at 3 ranges	1 Lux (0 to 2000 Lux) 10 Lux (10 to 20,000 Lux) 100 Lux (10-50,000 Lux)	±5% of full scale	DC 9 Volt (1604A, 6LF22 or equivalent)

Professional Bench Top Series

The bench-top meters offer high precision measurement for laboratory standards. All meters come with standard electrode stand, probe and electrode and PC link software.



Professional Bench Top pH Meter BP3001

3-in-1 function: pH, mV & temperature. Simultaneous pH-temperature display. Up to 5 calibration points with NIST, ISO or custom standard. 99 data memory with Real time clock & date. Computer link with USB cable and software kit.

Professional Bench Top Conductivity Meter BC3020

Large LCD with simultaneous display of conductivity and temperature. Up to 5 calibration points (at 1 point per range). 99 data memory with Real time clock & date. Computer link with RS232 software kit.

Order Code	Product	Measuring Range	Resolution	Accuracy	Temperature Compensation	Power Supply	Other Parameters
BP3001	Professional Bench Top pH Meter BP3001	0 to 14pH ±1999mV 0 to 80°C	0.01pH 0.1mV (-200 to +200mV) 1mV (Full Scale) 0.1°C	±0.02pH ±0.2mV (-200 to +200mV) ±2mV (Full Scale) ±0.5°C	0 to 80°C	AC-DC adapter 110 / 230VAC – 12 VDC equivalent	Offset Recognition: ±60mV at pH7 Slope 75% to 115%
BC3020	Professional Bench Top Conductivity Meter BC3020	0 to 1999uS 0 to 1999mS (Auto Range)	0.05% full scale	±1% full scale +1 digit	0 to 80°C	AC-DC adapter 110 / 230VAC – 12 VDC equivalent	TDS factor: 0.40 – 1.00 Cell Constant: 0.1, 1.0, 10

Electrodes

Careful selection on the right type of electrode for specific application will give full extend of usage on the electrode's life. All electrodes comes with 1 meter cable and regular BNC connector and delivered in soaker bottle ready for instant use.



pH Electrodes

ORP Electrodes



PP5010
PP5003



PP5004



PP5052
PP5053
PP5055



PP5054



PP5060



PP5056



PO5003



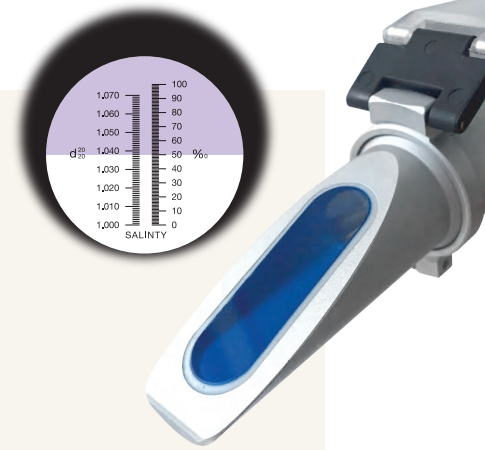
PO5006

Model	Purpose / Usage	Recommended Usage											Range	Operating Temperature	Max Pressure	Applications		
		High Viscosity	Cream / Cheese	Semi Solid / Soil	Meat / Fish	Polluted Waste	Poor Ion Solution	Oil base liquid	Solvent, Thinner	Enamel Paint	Strong Acid	Alcohol base					Emulsion paint	Ink
pH Electrodes																		
PP5003	Plastic body combination pH electrode, General purpose														0 to 14pH	0 to 70 °C		General Purpose
PP5004	Plastic body combination pH electrode with Pointed Tip and Polymer Reference	•	•	•	•	•		•							2 to 14pH	0 to 60 °C		For semi-solid and soil measurement
PP5010	Plastic body combination pH electrode with build-in Temperature Sensor for BP3001 & HP3040														0 to 14pH	0 to 80 °C		General Purpose use with BP3001 / HP3040
PP5052	Glass body combination pH electrode, General purpose														0 to 14pH	0 to 80 °C	6 bar	General Purpose
PP5053	Glass body combination pH electrode with polymer reference for Viscous liquid	•	•	•	•	•		•							2 to 14pH	0 to 80 °C	6 bar	For semi-solid or high viscosity sample
PP5054	Glass body combination pH electrode with Pointed-Tip and Polymer Reference	•	•	•	•	•									2 to 14pH	0 to 60 °C		For semi-solid or food sample
PP5055	Glass body combination pH electrode -5 to 130 °C	•	•	•	•	•		•							0 to 14pH	-5 to 130 °C	6 bar	For high temperature sample
PP5056	Glass body combination pH electrode with flat tip		•		•										0 - 14pH	0 to 80 °C		Skin, surface, small sample
PP5060	Glass body combination pH electrode with Re-fillable Reference								•						0 to 14pH	-5 to 100 °C		For strong acid sample
ORP Electrodes																		
PO5103	Plastic body combination platinum wire ORP electrode														±2000mV	0 to 80 °C		Economical general purpose
PO5106	Plastic body combination platinum ring ORP electrode														±2000mV	0 to 80 °C		General Purpose



Refractometer

Trans Handheld refractometers are useful for the measurement of Sugar, prediction of Alcohol and Salinity. They are widely used in food industry, winery and breweries, syrup and mixture processes. These meters are self contain and made of precision prism and optics. Most meters come with bi-metal automatic temperature compensator which increases accuracy. The design utilizes natural light source and does not require any battery to operate.



Model	Description	Range	Scale division/Resolution	Accuracy
Brix Refractometer (general purpose gauging of sugar concentration in juices etc..)				
RBX0010	Brix Refractometer 0~10% ATC	Brix: 0-10%	Brix: 0.1%	Brix: ±0.10%
RBX0018	Brix Refractometer 0~18% ATC	Brix: 0-18%	Brix: 0.1%	Brix: ±0.10%
RBX0032	Brix Refractometer 0~32% ATC	Brix: 0-32%	Brix: 0.2%	Brix: ±0.20%
RBX2826	Brix Refractometer 28~62% ATC	Brix: 28-62%	Brix: 0.2%	Brix: ±0.2%
RBX4582	Brix Refractometer 45~82% ATC	Brix: 45-82%	Brix: 0.5%	Brix: ±0.5%
RBX0080	Brix Refractometer 0~80%	Brix: 0-80%	Brix: 0.5%	Brix: ±2%
Salinity (for gauging concentration of salt in liquid)				
RSA0100	Salinity / SG Refractometer 0~100ppt / 1~1.070sg ATC	Salinity: 0-100ppt	Salinity: 1ppt	Salinity: ±1ppt
		Specific Gravity: 1.000-1.070	Specific Gravity: 0.001	Specific Gravity: ±0.001
RSA0028	Salinity Refractometer 0~28% ATC	Salinity: 0-28%	Salinity: 0.2%	Salinity: ±0.2%
		Refractive Index: 1.30-1.81	Refractive Index: 0.01	
Grape - Alcohol Refractometer (for gauging grape juice sugar concentration and prediction of potential Alcohol)				
RW2025	Euro Wine Refractometer 0~20 Baume / 0~25 Alcohol prediction ATC	Alcohol : 0-25%	Alcohol : 0.2%	Alcohol : ±0.2%
		Baume: 0-20be°	Baume: 0.2 be°	Baume: ±0.2 be°
RW0025	Grape Alcohol Refractometer 0~25% Alcohol prediction ATC	Alcohol : 0-25%	Alcohol : 0.2%	Alcohol : ±0.2%
RW4025	US Grape Refractometer 0~40 Brix / 0~25% Alcohol prediction ATC	Alcohol : 0-25%	Alcohol : 0.2%	Alcohol : ±0.2%
		Brix: 0-40%	Brix: 0.2%	Brix: ±0.2%
Grape Refractometer (for gauging grape juice sugar concentration)				
RW3230	US-German Grape Refractometer 0~32 Brix / 30~140°Oe ATC	Brix: 0-32%	Brix: 0.2%	Brix: ±0.2%
		Oechsle: 30-140°Oe	Oechsle: 1.0°Oe	Oechsle: ±1.0°Oe
RW3225	US-Euro Grape Refractometer 0~32 Brix / 0~140°Oe / 0~25°KMW ATC	Brix: 0-32%	Brix: 0.2%	Brix: ±0.2%
		Oechsle: 0-140°Oe	Oechsle: 1.0°Oe	Oechsle: ±1.0°Oe
		KMW: 0-25°	KMW: 0.2°	KMW: ±0.2°
RW4440	US-Euro Grape Refractometer 0~44 Brix / 0~190°Oe / 0~40°KMW	Brix: 0-44%	Brix: 0.5%	Brix: ±0.5%
		Oechsle: 0-190°Oe	Oechsle: 2.0°Oe	Oechsle: ±2.0°Oe
		KMW: 0-40°	KMW: 0.5°	KMW: ±0.5°
Honey Refractometer (for gauging honey moisture and sugar concentration)				
RH5890	US-Euro Honey Refractometer 58~90 Brix / 38~43 Baume ATC	Brix: 58-90%	Brix: 0.5%	Brix: ±0.5%
		Baume: 38-43Be'	Baume: 0.5Be'	Baume: ±0.5Be'
		water: 12-27%	water: 1%	water: ±1%
Alcohol Refractometer (for gauging percentage of Alcohol in water)				
RAL0080	Alcohol Refractometer 0~80% v/v Alcohol	0-80%	1%	±1%

CAL calibration standards

CAL calibration standard solutions comes in two bottle sizes as well as in single satchels. These standards are made with precision. The reference meter that qualifies them are calibrated against solutions that are traceable to the ASTM standards.

Redox standard solution in bottle	Order Code	
	90ml	500ml
CAL 475mV Standard Redox Solution	SO0475N	SO0475F
Conductivity Standard solution in bottle	90ml	500ml
CAL 1413µS Standard Conductivity Solution	SC1413N	SC1413F
CAL 990ppm Standard TDS Solution	ST0990N	ST0990F
CAL 1382ppm Standard TDS Solution	ST1382N	ST1382F
CAL 2.76EC / 27.6cF / 1935ppm Standard Solution	SC0276N	SC0276F
CAL 6.7EC / 67cF / 4700ppm Standard Solution	SC0067N	SC0067F
CAL 12.88mS Standard Conductivity Solution	SC1288N	SC1288F
CAL 6440ppm Standard TDS Solution	ST6440N	ST6440F
CAL 0.5% / 5 ppt Standard Salinity Solution	SS0005N	SS0005F
CAL 30ppt Standard Salinity Solution	SS0030N	SS0030F
CAL 74µS Standard Conductivity Solution	SC0074N	SC0074F
CAL 70ppm Standard TDS Solution	ST0070N	ST0070F
CAL 650ppm Standard TDS Solution	ST0650N	ST0650F
pH Buffer Solution in bottle	90ml	500ml
CAL pH 7.00 Standard pH buffer Solution	SP0700N	SP0700F
CAL pH 4.01 Standard pH buffer Solution	SP0401N	SP0401F
CAL pH 10.01 Standard pH buffer Solution	SP1001N	SP1001F
pH Buffer Solution in single satchels	18ml Satchel	
CAL pH7.00 Satchel 10pcs/Box	SP0700S	
CAL pH4.01 Satchel 10pcs/Box	SP0401S	
CAL pH10.01 Satchel 10pcs/Box	SP1001S	



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