



# 2020

catalogue

excellence & innovation in electrochemistry



# ABOUT EDT directIOn



EDT directIOn have a proud tradition of developing and supplying both novel and conventional electrochemistry products. Our products are manufactured and fully supported in the UK at our Manufacturing and laboratory facilities in Dover UK.

We are world leaders in solid state ISE technology and are pioneers in the production and development of maintenance-free Combination ISE's.

EDT have manufactured pH, Conductivity and Dissolved Oxygen meters for nearly 50 years. These products are robust and reliable with an extremely low cost of ownership and are complimented by an extensive range of electrodes and consumables.

We are committed to supplying the best possible products to meet the demands of today's analyst and servicing them long after initial delivery.

We are a British Manufacturer of Electrochemistry meters and sensors.

For technical support, documentation, tutorials or product information please visit our website where products can be purchased on-line and delivered to your door from stock. We ship all over the world and support our products long after initial sale.

EDT directIOn are always researching and developing new electrochemistry products. Should you have an area where we may be able to collaborate or provide custom products just email us at [info@edt.co.uk](mailto:info@edt.co.uk)

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# pH Products

## Pocket pH Meters non Glass (ISFET)

The S2K series are non glass pocket pH meters providing the accuracy of a standard portable meter but with the flexibility to measure almost any sample. They are particularly useful for the measurement of semi solids such as cheese, pastes and other food and biological products.

The solid state ISFET (Ion Sensitive Field Effect Transistor) can be easily cleaned after measurement with a soft brush. The Reference electrode has a high volume reservoir for long life and is readily replaceable.

The rugged modular design provides reliable pH analysis in applications where glass electrodes are not an option. Calibration is possible using 1, 2 or 3 points with as little as 1 drop of buffer solution. Temperature compensation (ATC), Automatic buffer recognition and stability indicators make the EDT S2K series extremely simple to operate.

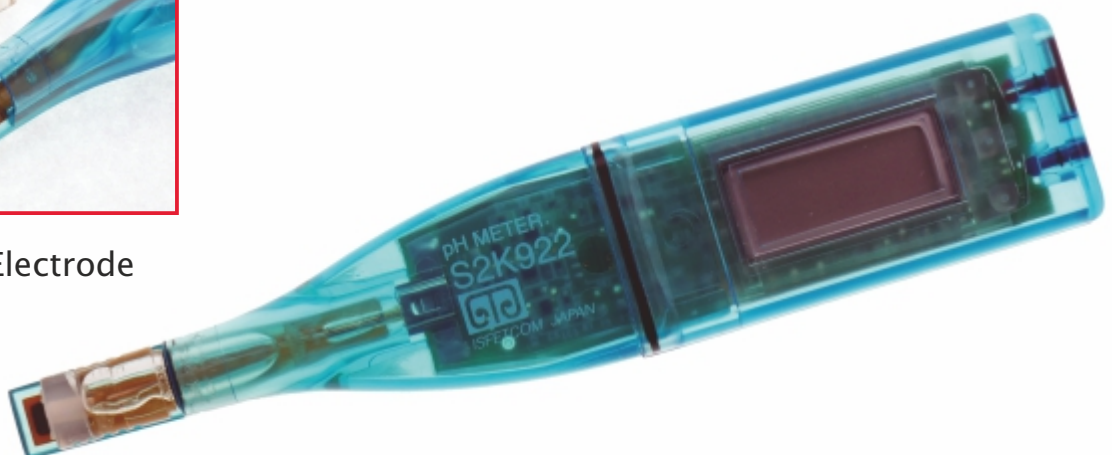
Features include a clear LCD display of both pH and Temperature in a Waterproof, IP67 rated case. The On Chip Sensor is placed within 5mm of the Reference junction making it possible to measure samples as small as one drop.

Response times are in seconds with built in Automatic Temperature Compensation (ATC) and Automatic Buffer Recognition for easy calibration. Product fits comfortably into the pocket with a pocket clip for security.

Battery life is an impressive 150 hours with Auto Power Off when you forget!



Replaceable Electrode





Parameter	S2K712	S2K922
pH Range	2 to 12	2 to 12
pH Resolution	0.1	0.01
Accuracy	0.1pH	0.02pH
Battery Life	150Hrs	150Hrs
Dimensions	142 x 28 x 15mm (LWH)	142 x 28 x 15mm (LWH)
Display	Clear Backlit LCD	Clear Backlit LCD
Power	3V L-ion CR2032	3V L-ion CR2032
Reference Type	Replaceable Ag/AgCl with KCl	Replaceable Ag/AgCl with KCl
Sensor Type	Silicon Chip pH ISFET.	Silicon Chip pH ISFET.
Temperature	On chip Temp.	On chip Temp.
Accuracy	1 Degree C	1 Degree C

## Portable pH meter Model QP451

The QP451 Portable pH meter is the first in a series of Quality Portable meters from EDT directION. All are state of the art instruments made in the UK.

The clear graphic display guides the user through every operation ensuring that even the most unskilled operator can perform accurate analysis without an instruction manual. Every instrument in the QP range has a mini USB output for printing or exporting sample and calibration data. If printing is not possible there is a 10,000 data point, 64 file internal memory to enable field data to be recorded.

Power is via 4 x AA batteries. Lifetime is impressive due to a highly efficient display with brightness and contrast options along with many other power saving features. Other features include 1 ,2 or 3 Point Calibration, Auto endpoint function, automatic temperature compensation (ATC), Automatic buffer recognition and correction, calibration alarms, millivolt and Relative millivolt modes, Real time clock, data logging mode and an impressive array of accessories and consumables.

The QP range are extremely tough, splash-proof, practical and carry a two year warranty.

pH Range	-2 to 16pH
pH Accuracy	(+ \ -) 0.01
mV Range	(+ \ -) 1999mV
mV Accuracy	(+ \ -) 0.1mV
Temp Range	0-105 degrees C
Temp Resolution	0.1 Degrees C
Power Supply	4 x AA Battery
Battery lifetime	250 Continuous hours
Environment	0-50°C. 0-100% RH
Dimensions	175 x 88 x 48mm
Weight	350g
Connectors	BNC (pH) 3.5mm Jack (ATC)





# Bench Meters

## GP353 General Purpose Bench pH Meter

The GP353 General purpose pH meter pH is a high quality durable bench instrument with traditional rotary controls designed for ease of use. It measures pH, mV and temperature and affords the user pH measurements accurate to  $\pm 0.01$  pH units on a clear digital LCD display.

The GP353 is ideally suited to busy laboratories and routine operations. Changes in temperature are catered for with the Automatic Temperature compensation function (ATC). The battery option (9V) provides flexibility and manual calibration controls enable the use of any buffer solutions for one or two point calibrations.

Any combination pH electrode with a BNC connector is compatible with the GP353 pH meter whilst use of a pH half-cell and separate reference electrode is made possible by the single 4mm Reference electrode socket.

The mV mode allows the use of Redox and Ion Selective electrodes. The GP353 pH meter has a recorder output for use with recorders or data-loggers and can be run on either battery or mains power.

Supplied with ATC probe, buffers, stand, mains adapter and 9V Battery.



## QC355Tx Quality Control Bench pH Meter.

The EDT QC355Tx Routine Quality Control pH meter has been designed for routine pH measurements with the emphasis on accuracy, consistency and reliability.

QC applications often involve the need for rapid precise results produced by any one of a multiple of operators. The QC355Tx has many standard features which ensures that standard operating procedures are adhered to and that calibration is performed regularly and accurately.

Automatic Temperature Compensation (ATC) is compulsory which ensures that any temperature variation between samples and standards are corrected without the need for manual measurement or adjustment. Automatic buffer recognition means that the instrument will recognize standard pH4, 7 and 10 buffer solutions and perform automatic calibration at the push of a single button. This means that the use of unauthorized or unusual calibration solutions is not possible .

A stability indicator ensures that user or operator bias is eliminated thereby providing consistent results regardless of operator.

Most Quality control applications require that the pH calibrations be performed at prescribed regular intervals. The QC355Tx provides this option with a calibration clock function so that good laboratory practice is adhered to at all times.

To provide consistency it is important that QC instruments are not used for other applications which can cause the loss of calibration settings .The QC355Tx has no other modes such as millivolt or manual temperature compensation. This ensures the integrity of the calibration settings and routines which are critical in QC applications.

For applications requiring buffers other than pH4, 7 and 10, a millivolt mode allowing the use of ISEs or REDOX probes or manual temperature compensation the EDT Model RE357Tx is the model of choice.

The QC355Tx pH meter can be operated using either battery or mains power and is compatible with any of the pH Combination electrodes offered by EDT directION.



## RE357Tx Research Bench pH Meter

The RE357Tx Automatic Research pH meter is robust and easy to operate designed to give results that are both accurate and reliable with the minimum of user involvement.

The splash-proof case and battery facility provide a high degree of versatility. The RE357Tx offers a choice of manual or automatic control, a millivolt (mV) mode for ISE work and a recorder output for data-logging or continuous monitoring.

With the ability to measure millivolts to  $\pm 0.1$  mV this instrument can also be used for Redox and Ion Selective Electrode measurements. For direct reading concentration work with ISE's the Model DR359TX is the meter of choice. The RE357Tx Research pH meter will cater for most pH applications and is compatible with any of the complete range of pH, reference, combination and Ion Selective Electrodes made by EDT directION.

The BNC and 4mm ref connections are also compatible with most common pH and reference electrodes. Other features include built-in error codes providing diagnostics for poor slope or incorrect buffers, automatic buffer recognition and temperature correction.

The RE357Tx can be battery or mains powered and is supplied complete with ATC probe, buffers, stand, mains adapter and 9V battery.





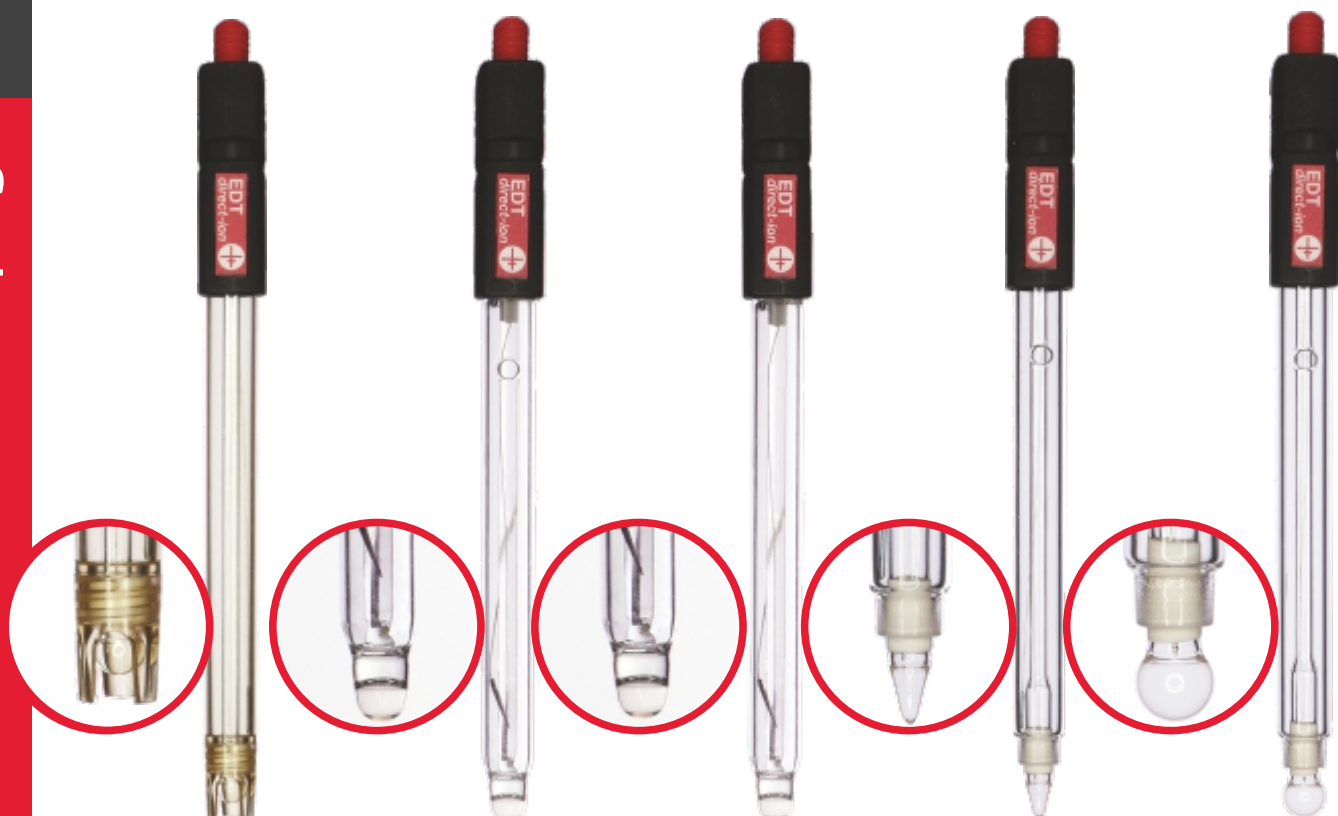


Quality pH Products Made in the UK

### Bench pH Meters Technical Specifications:

Specs.	GP353	QC355Tx	RE357Tx
pH Range	0-14	0-14	0-14
pH Accuracy	0.01	0.01	0.01
mV Range	(+/-)1999mV	No mV Mode	(+/-)1999mV
mV Accuracy	1mV	No mV Mode	0.1mV
Temp Range	0-100	0-100	0-100
Temp Resolution	0.1	0.1	0.1
pH Calibration	2 Point (any buffer)	pH4,7or10	1,2 Points. pH4,7or10
Power Supply	Battery 9V and Mains Adapter	Battery 9V and Mains Adapter	Battery 9V and Mains Adapter
Environment	0-50°C. 0-100% RH	0-50°C. 0-100% RH	0-50°C. 0-100% RH
Dimensions	210 x 150 x 88mm	210 x 150 x 88mm	210 x 150 x 88mm
Weight	550g	550g	550g
Output	Recorder Output	RS232C	RS232C

## pH and Redox electrodes



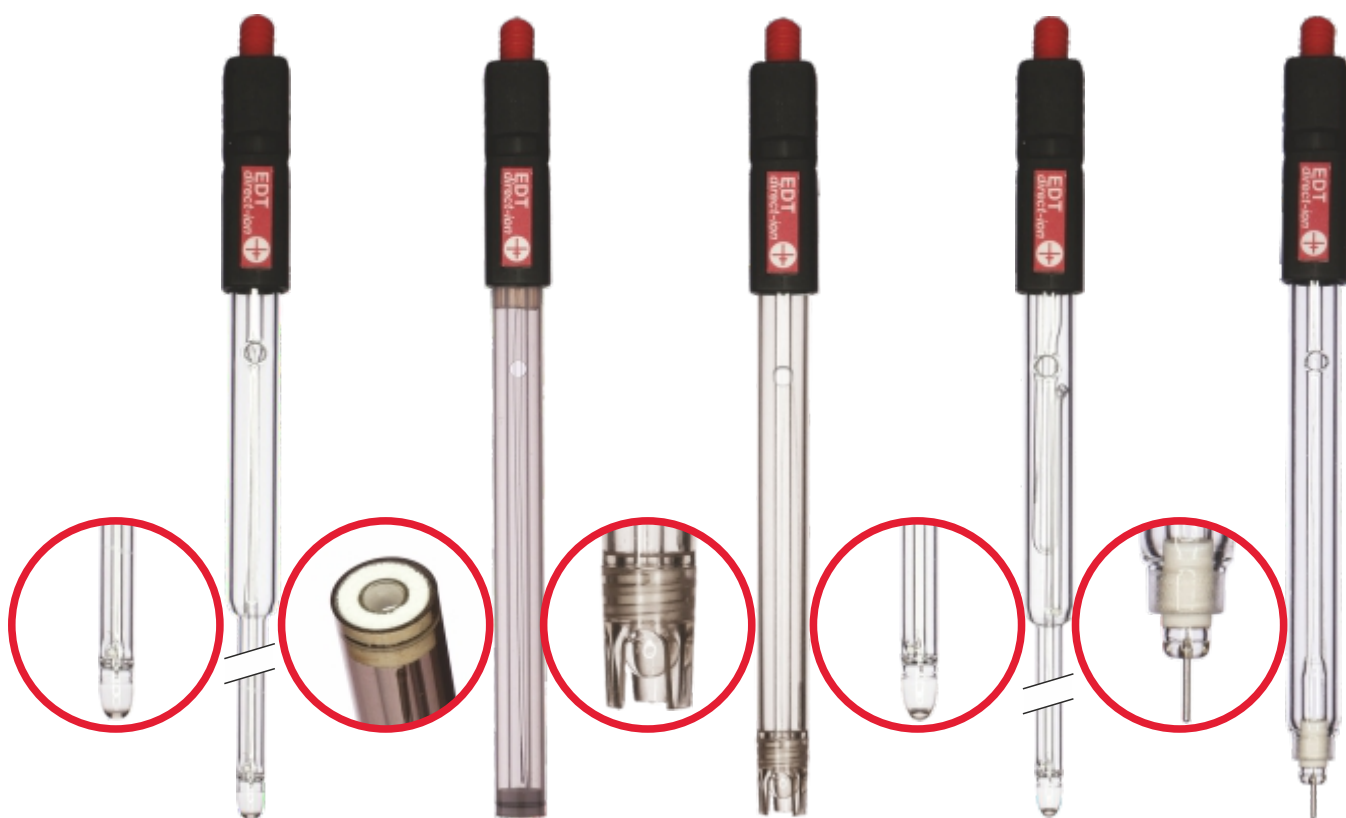
E8080

E8081

E8082

E8084

E8085



E8086

E8087

E8089

E8100

E8106



## pH and Redox electrodes (Cont.)

EDT directION pH electrodes represent excellent value for money and provide the following ;

Fast response times with excellent stability.

High quality finish (Manufactured in the UK)

Compatibility with all common pH meters

Full technical support

Full application coverage though a wide selection of products.

The measurement of pH is just about the most common test performed in laboratories or out in the field. The samples vary from water to blood and from meat to concrete. As a result there are a vast array of Electrodes each one designed to suit specific applications. Selection of the correct electrode is therefore crucial to achieve the correct result. EDT directION manufacture a high quality selection of pH Electrodes to cover most applications.

### pH and Redox Electrodes Specifications

Cat No.	Length	Dia. at Tip	Junction	Body Material	Combo	Refillable
E8080	120MM	12MM	Annular Ceramic	Polymer	Yes	No
E8081	120MM	12MM	Ceramic	Glass	Yes	Yes
E8082	120MM	12MM	Ceramic	Glass	No	No
E8084	120MM	Point	Ceramic	Glass	Yes	Yes
E8085	120MM	12MM	Annular Ceramic	Glass	Yes	Yes
E8086	250MM	4.5MM	Ceramic	Glass	Yes	Yes
E8087	120MM	12MM	Annular Teflon	Glass	Yes	Yes
E8089	120MM	12MM	Annular Ceramic	Polymer	Yes	Yes
E8100	165MM	4.5MM	Ceramic	Glass	Yes	Yes
E8106	120MM	120MM	Ceramic	Glass	Yes	Yes

## Reference Electrodes



9999



E8090



5094



A3135



E8094



E8095



E8195



## Reference Electrodes (Cont.)

Fundamentally there are two types of reference electrode. The Calomel ( $\text{Hg}/\text{HgCl}_2$ ) system and the Silver/Silver Chloride ( $\text{Ag}/\text{AgCl}$ ) products. Both leach out a small amount of filling solution during operation which provides electrical contact with the sensing electrode and helps provide a stable unchanging potential.

Both do the same job in principle but careful consideration is needed to select the right reference for the right application. Silver Chloride references do not contain mercury and are often considered more suitable for environmental applications. They are also less effected by higher temperatures than the Calomel electrode.

The Calomel electrode is refillable with Potassium Chloride and as such is less prone to reference junction blockage. With the  $\text{Ag}/\text{AgCl}$  references the filling solution has to be saturated with Silver Chloride which is slightly soluble in KCl. In some circumstances Silver salts can be deposited in the Ceramic reference junction leading to blockage and electrode failure. Calomel reference electrodes may also be used in TRIS applications unlike the  $\text{Ag}/\text{AgCl}$  equivalent. Calomel electrodes tend to have a longer lifetime.

The reference junction type is another option requiring consideration. Ceramic junctions are rugged and ideal for general applications. Annular junctions give a slightly higher leak rate and contact area and are therefore good for low ionic strength applications and offer greater stability. Teflon junctions are resistant to blockages and are great for harsh applications.

Finally Double junction references have the advantage of having an outer chamber which can contain an electrolyte of the users choice. This means that the electrolyte leaching into the sample during measurement can be selected to be inert and therefore not affect the result. The most common application is for use with Ion Selective Electrodes or in cases where chloride interferes with the result.

EDT reference electrodes are compatible with all other manufacturers meters and sensing electrodes. The connector type can be amended to suit the meter in question.

### Reference Electrodes Specifications

Cat No.	Length	Ref Type	Junction	Body Material	Refillable	Connector
E8090	120MM	Calomel	Ceramic/Single	Glass	Yes E8064	4mm Pin
E8094	120MM	Calomel	Ceramic/Double	Glass	Yes E8064	4mm Pin
E8095	120MM	$\text{Ag}/\text{AgCl}$	Ceramic/Single	Glass	Yes E8067	4mm Pin
E8195	120MM	$\text{Ag}/\text{AgCl}$	Ceramic/Double	Glass	Yes E8067	4mm Pin
A3135	120MM	$\text{Ag}/\text{AgCl}$	Teflon/Single	Glass	No	BNC
9999	150MM	$\text{Ag}/\text{AgCl}$	Teflon/Single	Polymer	No	4mm pin
5094	120MM	Chloride	Disc Liquid	Polymer	Yes E8064	4mm pin



## Buffer & Filling Solutions

### pH Buffers Solutions

EDT pH Buffer Solutions ensure that you make accurate pH measurements. Calibration using 1,2 or 3 buffer solutions is essential. Most are colour coded for easy identification without the need to write on glassware.

Buffer solutions should not be reused once they have been standing in an open beaker.

Never pour back into the buffer bottle.

pH buffer capsules can be useful to give the flexibility of being able to produce accurate pH standards wherever you are.



### Electrode Filling solutions and accessories.

Many of the pH and reference electrodes are refillable. For combination pH electrodes or single junction references there are two different solutions to choose from. Getting this selection right is important. For pH electrodes and references with an Ag/AgCl reference the filling solution must be Saturated KCl with Ag/AgCl. For Calomel references the AgCl is not required and Saturated KCl is used.

Storage of electrodes is also important as these electrodes cannot be stored dry and should not be stored in Deionised water, tap water or pH Buffer. If you are not using our Electrode storage solution then storing the electrode in the filling solution is acceptable in the short term.

All filling solutions from EDT directiON are compatible with pH and reference electrodes from other manufacturers.



## QP458 Combined pH & Conductivity Meter

The QP458 Portable pH meter is the third in a series of Quality Portable meters from EDT directION. All are state of the art instruments made in the UK.

The clear graphic display guides the user through every operation ensuring that even the most unskilled operation can perform accurate analysis without an instruction manual. Every instrument in the QP range has a mini USB output for printing or exporting sample and calibration data. If printing is not possible there is a 10,000 data point, 64 file internal memory to enable field data to be recorded.

Power is via 4 x AA batteries. Lifetime is impressive due to a highly efficient display with brightness and contrast options along with many other power saving features.

Other features include:

- Dual pH and Conductivity Display
- 1 ,2 or 3 Point pH Calibration
- Auto Conductivity Calibration
- Auto endpoint
- Automatic Temperature Compensation (ATC)
- Automatic Standard Recognition
- pH Buffer correction
- Calibration alarms
- Millivolt and Relative millivolt modes
- Total Dissolved Solids (TDS) Mode
- Data logging and internal Data storage.
- Micro USB Data output
- Real time clock
- BNC /DIN and 3.5mm Jack connectors
- Impressive array of accessories and consumables.

The QP range of products are extremely Tough, Splash-proof and practical and carry a two year warranty.



## pH Accessories

Measuring pH is incredibly common. Anything we eat or drink gets measured. Industry and Agriculture are other common areas for analysis. Variety of samples means the need for a large variety in products and accessories required.

### Electrode Stands

Our series 3 Bench Meters come complete with a full set of accessories when ordered as a Kit. Sometimes however more flexibility is required. The E8060 Flexible Stand and Electrode Holder is perfect for laboratory work or just to ensure that electrodes are kept safe, upright and ready for use.

### ATC /Temperature probes

All EDT directION Temperature probes are made from Stainless steel with embedded 10K thermistors to ensure accuracy and a fast response. ATC probes are included in all Meter kits unless the electrode itself has a built in Thermistor.

### Batteries

Series 2 and 3 Field and bench instruments have a Battery option. All take one PP3 9Volt cell. The new Series 4 Portable instruments take 4 x AA Batteries and have an array of battery lifetime saving functions.

### Field Carry Cases

All Series 2,3 and 4 instruments have a Battery option which means they are all suitable for Field work. When ordered as a Kit the Series 2 and 4 meters will be supplied in a robust Carry Case.



# Reduction/Oxidation (REDOX) and Corrosion

Chemical reactions involving oxidation and reduction are characterised by the release or the consumption of electrons. If you measure the availability of free electrons you can understand much about the solution you are measuring.

For example you will be able to tell if the solution has the potential to be highly oxidising or reducing which may be useful in determining the effectiveness of agents such as Chlorine or Sulphur dioxide. If for example you have just sterilized your steel containers for food production it would be useful to know if any of the agent remained before you added fresh ingredients.

The same applies to washing salads. You would want to be sure all washings are not tainted before you sell them.

Likewise if you had a metallic structure exposed to salt water you would want to know if corrosion is taking place e.g. when Iron(II) is converted to Iron(III). This, and other REDOX reactions can be followed by measuring the mV potential using a Platinum sensing electrode and an appropriate reference electrode.

In some cases metal structures can be monitored by connecting them to the mV meter as the dynamic electrode and measuring its potential versus the right reference electrode.

EDT directiON produce a range of meters and electrodes ideal for the measurement of REDOX reactions and corrosion potentials.

## QP451 Portable REDOX/Corrosion Meter

The QP451 pH/mV meter is ideal for the measurement of REDOX potentials. All measurements are made in the mV mode to a resolution of 0.1 mV. In addition the Relative mV mode allows a baseline solution to be set at 0 mV. e.g. you can set Redox standards or ideal state solution at zero and monitor deviations more easily.

The QP451 also has logging, printing and data storage to enable the tracking of the potential changes.

The GP353 pH/mV meter is very simple to use and will allow the measurement of mV potentials in the lab environment. The meter is Battery or mains controlled.



E8106

## Conductivity Meters

EDT directION manufacture a complete range of bench and portable Conductivity Meters for all applications. The key to successful conductivity measurement is matching the conductivity cell to the sample.

We manufacture all electrodes and instruments in the UK and impressive range of sensors from industrial dip cells to micro flow cells.

### QP481 Portable Conductivity /TDS meter.

The QP481 Portable Conductivity/TDS meter is the second in a series of Quality Portable meters from EDT directION. All are state of the art instruments made in the UK.

The clear graphic display guides the user through every operation ensuring that even the most unskilled operation can perform accurate analysis without an instruction manual. Every instrument in the QP range has a mini USB output for printing or exporting sample and calibration data. If printing is not possible there is a 10,000 data point, 64 file internal memory to enable field data to be recorded.

Power is via 4 x AA batteries. Lifetime is impressive due to a highly efficient display with brightness and contrast options along with many other power saving features.

Other features include:

- Automatic Calibration
- Auto endpoint
- Automatic Temperature Compensation (ATC)
- Simple Set Up Menu
- Auto Ranging
- TDS Mode with adjustable TDS Factor
- Data logging and internal Data storage.
- Micro USB Data output
- Real time clock
- Din Connector for Conductivity/Temp probe.
- Impressive array of accessories and consumables.



The QP range of products are extremely Tough, Splash-proof and practical and carry a two year warranty



ATC	ATC across the entire range
Autoranges	Select the correct unit range Automatically.
Battery Life	Over 200 Hours continuous use
Commodity Code	90278011
Conductivity Accuracy	+/- 0.2% of Reading
Conductivity Range	Auto-ranging from 0- 999mS/cm. in appropriate units
Connection	Multi pin DIN for Conductivity/Temperature combined probe.
Data Output	Mini USB. Outputs csv at 38400 Baud
Data Storage	Internal storage of up to 64 files. Logging maximum 10,000 data points
Display	Backlit LCD Graphic Display
Power requirement	4 X AA Batteries
Reference Temperature	Set at 25 degrees C.
Size	175x88x48mm (LWH). Meter Only
Temperature Coefficient	Set at 2% Per degree.
Temperature Range	-30 to +130 Degrees Centigrade
Weight	350g Meter Only



## BA380 Basic bench Conductivity Meter

The EDT BA380 Basic Conductivity meter is robust, easy to operate and is designed to give results that are both accurate and reliable.

This meter features front mounted controls, robust, splash proof case, automatic temperature compensation and four ranges from 0–200mS/cm.

The BA380 Conductivity Meter has an accuracy of +1% and is capable of mains or battery operation. The manual controls makes calibration extremely simple using the EDT conductivity standard solution provided. Once the calibration is set, the user may select the appropriate range for the sample and read conductivity value directly from the clear LCD display.

The EDT BA380 Conductivity Meter can be used with the complete range of EDT conductivity cells.

Supplied with Probe (E8071), calibration solution (A3052), stand (E8061), Mains adapter (E8041) and 9V Battery (A3060)



## GP383 General Purpose Conductivity Meter

The EDT GP383 General Purpose Conductivity meter is robust, easy to operate and is designed to give results that are both accurate and reliable. This meter features front mounted controls, robust, splash proof case, automatic temperature compensation and four ranges from 0–200mS/cm.

The GP383 Conductivity Meter has an accuracy of +1% and is capable of mains or battery operation. The manual controls makes calibration extremely simple using the EDT conductivity standard solution provided. Once the calibration is set, the user may select the appropriate range for the sample and read conductivity value directly from the clear LCD display.

In addition to the functions of the BA380 Basic conductivity meter the GP383 has temperature measurement and display. For more versatility and sophistication there are two further useful functions. Firstly the Known Cell constant of particular cells can be inputted directly allowing instant cell checking and to provide compatibility with additional instruments. Secondly the temperature coefficient is variable for greater accuracy.

The EDT GP383 Conductivity Meter can be used with the complete range of EDT conductivity cells. Supplied with Probe (E8071), calibration solution (A3052), stand (E8061), Mains adapter (E8041) and 9V Battery (A3060).





View of rear panel



## RE388Tx Research Bench Conductivity/TDC Meter

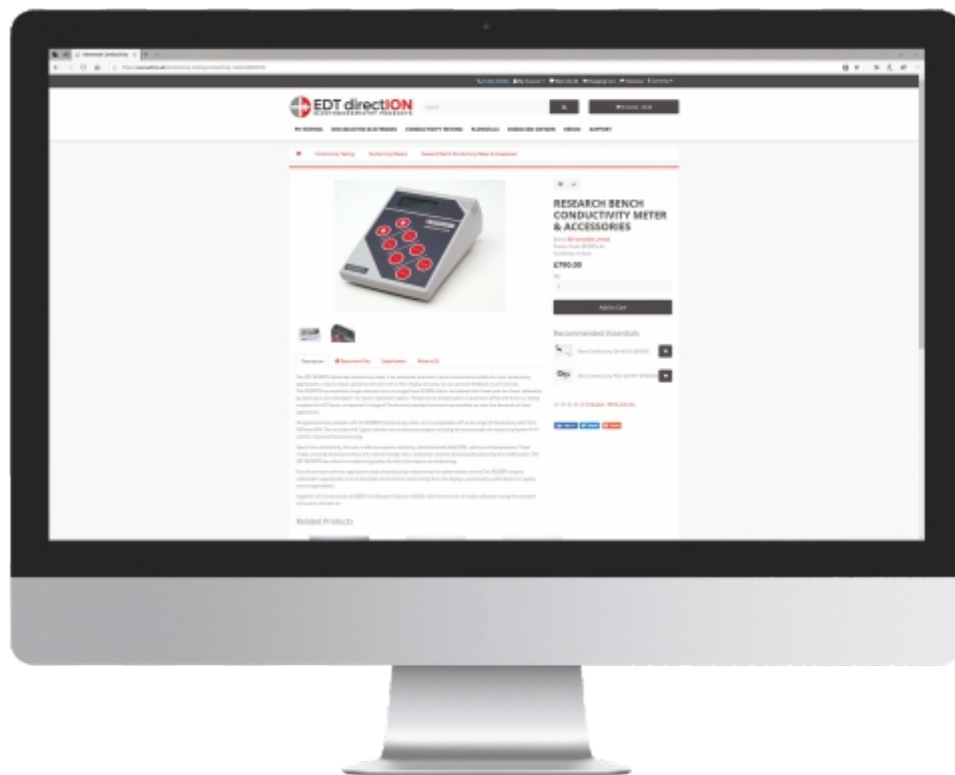
The EDT RE388TX Advanced conductivity meter is an advanced, automatic, bench instrument suitable for most conductivity applications. It has a robust ,splash-proof case with a clear display and easy to use, positive feedback, touch controls.

The RE388TX has automatic range selection over six ranges from 0–2000 mS/cm and allows both linear and non-linear calibration by allowing a user selectable 1 to 4 point calibration option. Temperature compensation is automatic (ATC) and there is a facility to adjust the ATC factor as required. A range of Conductivity standard solutions are available to meet the demands of most applications.

All applications are possible with the RE388TX Conductivity meter as it is compatible with a full range of Conductivity cells from EDTdirectiON. This includes K=0.1 glass cells for low conductivity analysis including de-ionized water to industrial polymer K=10 cells for industrial food processing.

Apart from conductivity, the user is able to measure: resistivity; total dissolved solids(TDS), salinity and temperature. These modes are all be accessed without the need to change cell or calibration and are all accessed by pressing the mode button. The EDT RE388TX has a built in re-platinizing option for cells that require re conditioning.

One of the most common application areas of conductivity measurement is concentration control. The RE388TX may be calibrated in appropriate units and sample concentration read directly from the display, a particularly useful feature in quality control applications. Supplied with Conductivity cell (E8071), Calibration Solution (A3052).



For More Information on EDT DirectiON Products visit [WWW.EDT.CO.UK](http://WWW.EDT.CO.UK)

## Conductivity Meter Specifications

Specs.	BA380	GP383	RE388TX
Conductivity Range	0–199.9mS/cm (4 Ranges)	0–199.9mS/cm (4 Ranges)	0–199.9mS/cm (5 Ranges)
TDS Range	None	None	0–132g/L (5 ranges)
Resistivity Range	None	None	0–19.99 MegOhm.cm (2 ranges)
Salinity Mode	None	None	Yes. With ATC
Concentration Mode	None	None	Yes. Choice of units
Accuracy	within 1% of Reading	Within 1% of reading	Within 0.3% of Reading
ATC Range	0–50 degrees C	0–50 degrees C	0–50 degrees C
Recorder Output	None	2 x 4mm Sockets. +/-200mV	2 x 4mm Sockets. +/-200mV
Reference Temp	25 degrees C	25 degrees C	25 degrees C
Temperature Range	No Temp Display.	–5 to 105 degrees C	–30 to 130 degrees C
Temperature Coeff.	Default 2%	Default 2%. Step adjustable	Default 2%. Fine adjustable
Display	12.7mm LCD	12.7mm LCD	12.7mm LCD
Power	9V Battery or Adapter	9V Battery or Adapter	9V Battery or Adapter
Instrument size	210 x 150 x 88mm	210 x 150 x 88mm	210 x 150 x 88mm
Weight	550g	550g	550g

## Conductivity Cells



EDT directiON manufacture a wide array of conductivity cells for all applications from pure water monitoring to industrial flow cells. From Rugged Epoxy dip cells to finely sculptured precision glass cells.

All EDT cells are compatible with the appropriate EDT conductivity meter but are not compatible with other brands of cell which may have different connectors or thermistors.

### Conductivity Electrode Specifications

Cat No.	Type	Dia.	Use	Range	Cell
E8071	Glass K=1	12MM	General	100 $\mu$ S–100mS	Platinum Plates
E8072	Glass K=0.1	12MM	Low Conductivity	0.01 $\mu$ S/cm–100 $\mu$ S/cm	Platinum Plates
E8070	Polymer K=1	12MM	General/Field	100 $\mu$ S–100mS	Platinum Plates
A5005	Glass K=1	12MM	Flow through. General	100 $\mu$ S–200mS	Platinum Plates
E5010	Polymer K=1	25MM	Industrial/Field	100 $\mu$ S–100mS	Graphite Plates
A6000	Glass K=1	5MM	Micro /Chromatography	100 $\mu$ S–200mS	Platinum Plates
A6000 ATC	Glass K=1	5MM	Micro /Chromatography	100 $\mu$ S–200mS	Platinum Plates
A5019	Polymer	12mm	General/Field	100 $\mu$ S–100mS	Graphite Plates



## Conductivity Accessories

### Conductivity Accessories

The Measurement of Conductivity is widespread from the analysis of Salt in our Food and the quality of Pure Water to the Chloride level in aggregates in the construction industry. The variety of samples means the need for a large variety in products and accessories required.

### Electrode Stands

Our series 3 Bench Meters come complete with a full set of accessories when ordered as a Kit. Sometimes however more flexibility is required. The E8060 Flexible Stand and Electrode Holder is perfect for laboratory work or just to ensure that electrodes are kept safe, upright and ready for use.

### ATC /Temperature probes

All EDT directION Temperature probes are made from Stainless steel with embedded 10K thermistors to ensure accuracy and a fast response. ATC probes are included in all Meter kits unless the electrode itself has a built in Thermistor.

### Batteries

Series 2 and 3 Field and bench instruments have a Battery option. All take one PP3 9Volt cell. The new Series 4 Portable instruments take 4 x AA Batteries and have an array of battery lifetime saving functions.

### Field Carry Cases

All Series 2,3 and 4 instruments have a Battery option which means they are all suitable for Field work. When ordered as a Kit the Series 2 and 4 meters will be supplied in a robust Carry Case.



# Ion Selective Electrodes (ISEs)

We have been making ISEs in the UK for nearly 50 years and are proud of our continuing research and development programme into novel sensors and new constructions. This commitment ensures that we continue to provide products to suit most applications be they laboratory, field, on-line or industrial.

EDT directION have novel solid state ISE technology allowing all sensors to be solid state and flexible enough to be manufactured in any size or form.

## Combination ISEs

This unique range of electrodes have built in (maintenance free) reference electrodes, solid state sensors and are ready to use out of the box.

Benefits include:

- Rugged Solid State Sensors
- No Filling solutions
- No membrane replacements
- Built in dry Reference electrode
- Waterproof and submersible
- Suitable for Laboratory and Field work
- Compatible with all pH and Ion Meters
- Stored dry for long lifetime
- Low cost
- Easy to use



EDT directION produce more solid state combinations ISEs than any other company in the world.

## Half Cell ISEs

A reference electrode is required to enable a measurement to take place. Though Calomel and single junction reference electrodes are suitable for measurements that do not suffer Potassium or Chloride interference it is recommended to use a Double Junction reference electrode. Our Technical and Laboratory specialists offer free advice and application support. [www.edt.co.uk/support](http://www.edt.co.uk/support).

Benefits include:

- Solid State Electrode
- No internal Filling solutions required
- Rugged Robust and Maintenance free
- Waterproof and Submersible
- Fixed or Detachable lead versions
- Compatible will all pH or Ion meters
- Long life and Low Cost



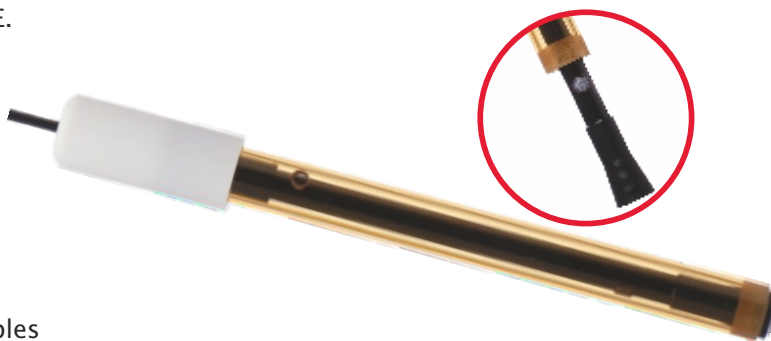
Our Technical and Laboratory specialists offer

### Refillable Flow Plus ISEs

The EDT directION Flow plus range incorporates two solid state ISE's in one 12 mm Epoxy body. One acts as the Sensor whilst the other is incorporated into the reference system. Flow plus combination ISE's do not require a separate reference electrode, making it convenient to use with small sample volumes. The sensor and reference are solid state which ensures a longer shelf life than any other type of ISE.

Benefits Include:

- Solid State Sensors
- Unblockable reference junctions
- Easy to dis-assemble and clean
- Long Life
- Handles dirty and awkward samples



The reference half-cell has a free-flowing liquid junction which will reduce drift and provide more stable readings than conventional ISE's. Flow plus electrodes are ideal for measuring awkward or dirty samples, which would clog conventional reference electrodes.

Flow plus ISEs require a filling solution. Approximate capacity of the reference chamber is 3ml.

The Flow plus reference system has a liquid junction provided by a conical plug which is opened or closed by rotation of the electrode cap. The wider the opening between body and plug the faster the electrolyte flows. Low ionic strength samples and samples with high viscosity or particulates are examples of media that require this increased flow.

Flow plus ISEs are ideal in situations where drift, slow response times and reduced electrode lifetimes are a problem.



### USB Combination ISEs

The EDT directION USB ISE can be connected directly to a PC, notebook or Windows tablet without the need for a dedicated Ion meter.

USB ISEs have the same specifications and benefits as our range of Combination ISEs.

The traditional BNC connector has been dispensed with and replaced with an active USB interface. When connected just select the "connectION" icon and select from a one or two point calibration.

The connectION software is easy to download and operate and is supplied free of charge on a USB Flash Drive.

Calibration and logging are selectable with the option of collecting the data in csv and HTML formats. The software includes one and two point calibration and auto endpoint detection. The calibration data is displayed along with results in direct concentration units.



## ISEs Cont.

### Miniature flowcell ISEs

ISE Flowcells from EDT directION are solid state, zero dead volume sensors that can be used independently or positioned in series to create a multi-element sensor system. A reference flow-cell is required for each set of flow cells. The ideal flow rate is around 1–10ml per minute using a peristaltic or syringe pump. Fluoride flow-cells have an ID of 1.2mm and all the others have an ID of 2.3mm.

These sensors are ideal for Flow Injection Analysis (FIA) or for situations where continuous monitoring is required. Measurements can be made in zero flow as required in stop/flow or static measurements.

The assembled sensor block (holder and flowcells) is approximately 20x50mm. Cells can be interchanged at will without disconnecting the tubing.

The ISE is in the form of a small solid state Acrylic block with a built in sensor. A flow through reference is required for operation (cat no 4001). These small ISEs have exactly the same specifications as the standard half-cell ISE but have further advantages such as:

- Zero dead Volume
- Large sample contact area
- Low sample volume (min 50 microliters)
- Easy cleaning
- Unlimited shelf life
- Compatible with all Ion/mV Meters
- Fast Response



The EDT Flowcell holders are constructed from Aluminium with Stainless steel fittings. Standard holders accept 1,2or 3 modules plus a reference Flowcell.



### Make your Own ISE

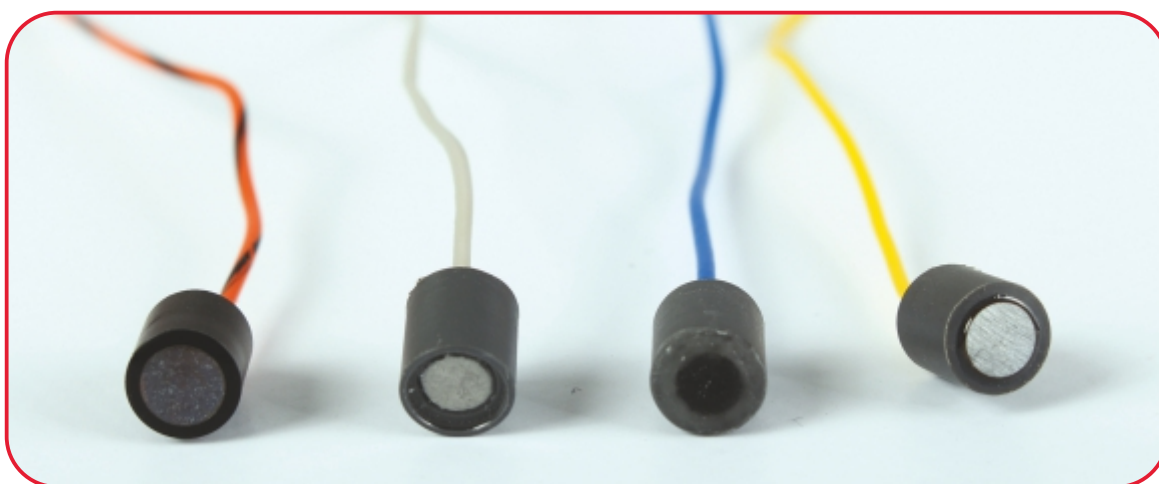
EDT directION are the world leading manufacturer of solid state ISE half cells and Mini ISE's. At the core of our ISE products are solid state sensors 7mm in diameter.

University/Research applications often require the need for specialist ISEs. Purchasing a mini ISE with cable allows the user to design and build their own ISE at a fraction of the cost of commercial custom sensors.

Benefits include:

- Solid State Electrode
- No internal Filling solutions required
- Rugged Robust and Maintenance free
- Waterproof and Submersible
- Compatible with all pH or Ion meters
- Long life and Low Cost

Mini ISE's require the use of a separate reference electrode. For ISEs that do not suffer Potassium or Chloride interference a standard Calomel reference is ideal. For all other applications a Double Junction reference electrode is required. Mini ISEs can be used as the main component of self-



### Hints on building your ISE.

All of our Mini ISEs are sealed units and have a PVC housing to allow for easy gluing/sealing into a variety of body materials. You will need to ensure that the sensor surfaces are protected during handling. Contact with adhesives will damage them

There is a single contact wire in the back of the electrode with a free (open wire) end. To produce a working electrode you will need to use a reference half-cell in conjunction with the sensor.





ISE Specification Table: For all ISE Types:

Cat No.	Species	Limits (ppm)	Temp Range	Interferences	pH Range
3302	Ammonia	0.02 – 17,000	0–50°C	Hydrazine	11–13
3051	Ammonium	0.9 – 9,000	0–50°C	K <sup>+</sup> Na <sup>+</sup>	0–8.5
3081	Barium	Discontinued	0–50°C	K <sup>+</sup> Na <sup>+</sup> Sr <sup>++</sup>	3–10
3271	Bromide	0.4 – 81,000	5–50°C	I <sup>–</sup> S <sup>–</sup> CN <sup>–</sup>	1–12
3241	Cadmium	0.1 – 11,200	5–50°C	Cu <sup>++</sup> Hg <sup>++</sup> Ag <sup>+</sup>	3–7
3041	Calcium	0.02 – 4,010	0–50°C	Ba <sup>++</sup> Al <sup>+++</sup> Sr <sup>++</sup>	3.5–11
3091	Carbonate	Discontinued	0–50°C	OAc <sup>–</sup> SCN <sup>–</sup>	6.6–9.6
3261	Chloride	1–35,500	5–50°C	I <sup>–</sup> Br <sup>–</sup> CN <sup>–</sup> S <sup>–</sup>	1–12
3227	Copper	0.006 – 64,000	5–50°C	Hg <sup>++</sup> Ag <sup>+</sup> + S <sup>–</sup>	2–7
3291	Cyanide	0.03 – 260	5–50°C	Br <sup>–</sup> I <sup>–</sup> S <sup>–</sup>	11–13
3221	Fluoride	0.02 – –1,900	5–50°C	OH <sup>–</sup>	4–8
3281	Iodide	0.06 – 127,000	5–50°C	S <sup>–</sup> CN <sup>–</sup>	2–12
3231	Lead	0.2 – 20,800	5–50°C	Hg <sup>++</sup> Ag <sup>+</sup> Cu <sup>++</sup>	3–7
3251	Mercury	0.2 – 201,000	5–50°C	Ag <sup>+</sup> S <sup>–</sup>	0–2
3921	Nitrate	0.4 – 62,000	0–50°C	Cl <sup>–</sup> NO <sup>–</sup>	2–11
3271	Nitrite	0.5 – 460	0–50°C	CN <sup>–</sup>	4.6–8
3061	Perchlorate	Discontinued	0–50°C	I <sup>–</sup> SCN <sup>–</sup> NO <sub>3</sub> <sup>–</sup>	0–11
3031	Potassium	0.04 – 39,000	0–50°C	Cs <sup>+</sup> NH <sub>4</sub> <sup>+</sup>	1–9
3211	Silver	0.01 – 107,900	5–50°C	Hg <sup>++</sup> S <sup>–</sup>	1–9
3301G	Sodium	0.002 – 69,000	0–50°C	Li <sup>+</sup> K <sup>+</sup> Ba <sup>++</sup>	9–12
3301	Sodium	1–35,000	0–50°C		1–12
3225	Sulphide	0.003 – 32,000	0–50°C	Hg <sup>++</sup> Ag <sup>+</sup>	13–14
3229	Thiocyanate	1 – 5,800	5–50°C	Cl <sup>–</sup> Br <sup>–</sup> I <sup>–</sup> S <sup>–</sup>	2–12

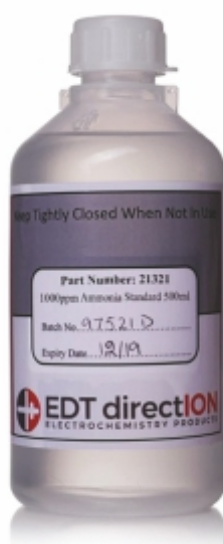
### DR359TX Direct Readout Ion Concentration Meter

The DR359Tx is a straightforward Ion Meter with the ability to measure and display Ion concentration using up to 5 calibration points.

Operation is extremely simple and can be mains or battery operated. Made entirely in the UK the DR359TX is compatible with the impressive range of combination and half-cell Ion Selective Electrodes available from EDT direction and represents incredible value for money compared to other Ion meters in the same class.

The DR359TX Ion meter comes in a robust splash proof case and is designed to give results that are both accurate and reliable over a wide range of applications. Most laboratories measuring Ion concentration will also measure pH. The DR359TX has the ability to operate as sophisticated pH meter with Automatic Temperature compensation (ATC) and automatic calibration.

The mV mode is ideal for Redox and titration applications and incremental ISE techniques such as Known and Sample Addition. Other functions include memory back up, temperature and slope inspection to check the condition of electrodes and standards. The RS232 interface allows direct printing of results or full external computer control.



### Standard Solutions and ISABs

ISE analysis requires the use of calibration standards and specifically formulated ISAB (Ionic Strength Adjustment Buffer) solutions. EDT direction offer technical and applications support to guide the operator through the method options to get the result you require. All standards and samples should have the same Ionic strength therefore it is important to add a small volume of ISAB to each standard and sample.



# Cathodic Protection

## Cathodic Protection/ Hull Potential Reference Electrode Model 9999

The Cathodic Protection Reference Electrode from EDT directION is a Silver /Silver Chloride Reference electrode designed to enable the measurement of the condition of boats and submerged metal structures in Water (Typically sea water)

The electrode is waterproof and submersible.

Common uses include the measurement of the effectiveness of Sacrificial Anodes (Zinc) bolted to boat hulls and drive components. Each material has a standard potential and deviations can illustrate the progress of corrosion.

The electrode is connected to the negative terminal of the Multi-meter or model QP451 pH/mV meter and the positive terminal is connected to the structure in question e.g. Boat Hull, Drive, etc. This electrode can also be used as a standard reference electrode for pH analysis.

The electrode comes complete with a 5 Metre cable.

The Model 9999 can also be used as a standard applications where low maintenance is required. The large electrolyte volume ensures a longer lifetime with greater stability than laboratory electrodes. The rugged housing enables the electrode to be used in a wider variety of environments for pH and REDOX applications.

The EDT Silver/Silver Chloride reference electrode has several advantages over a standard Calomel electrode. Firstly it does not contain Mercury and can therefore be used in a wider variety of applications. Secondly Ag/AgCl references have greater stability at higher temperatures.



EDT directION produce solid state ISEs which lend themselves to industrial and process applications as there are no internal filling solutions and require minimal maintenance.

We provide a variety of fixtures and fittings that allow our electrodes to be used in-situ for continuous monitoring in pipes and tanks etc. with many fitting options including  $\frac{3}{4}$ " and PG13.5 fittings.

We are pleased to offer advice regarding installation, calibration and use of our industrial electrodes. Where possible Flow through electrodes are preferable to in situ however applications are limited usually to Laboratory analysis of "clean" solutions.

Our pH Redox and Fluoride electrodes are designed for the Harshest Industrial Process Control conditions as well as hand held field use .

## pH and ORP Process Electrodes

Industry proven pH and ORP sensors and electrodes based on Patented Technology pioneered in the late 1970s and early 1980s and perfected on a continuous basis. Threaded bodies are PPS R4 FDA approved thermoplastic.

We also provide all common fitting options including Process Pipeline entry Fixed Housings

## Reference Electrodes

Inadequate Reference Electrodes are often the cause of process measurement problems. Our durable reference electrodes feature the following:

- Porous Teflon junction delivers high performance and low maintenance
- Double chamber reference system prevents fouling in harsh industrial conditions

The Teflon junction material is uniform in porosity which allows for precise electrolyte flow into measuring sample. This material also resists clogging by dirt and organic deposits that can lead to electrode failure.

## Temperature Measurement & Correction

Our Automatic Temperature Compensation system has many innovative features and benefits including

- Innovative Capillary TC Design
- TC is placed inside of pH bulb for rapid response.
- T95% is less than 2 minutes

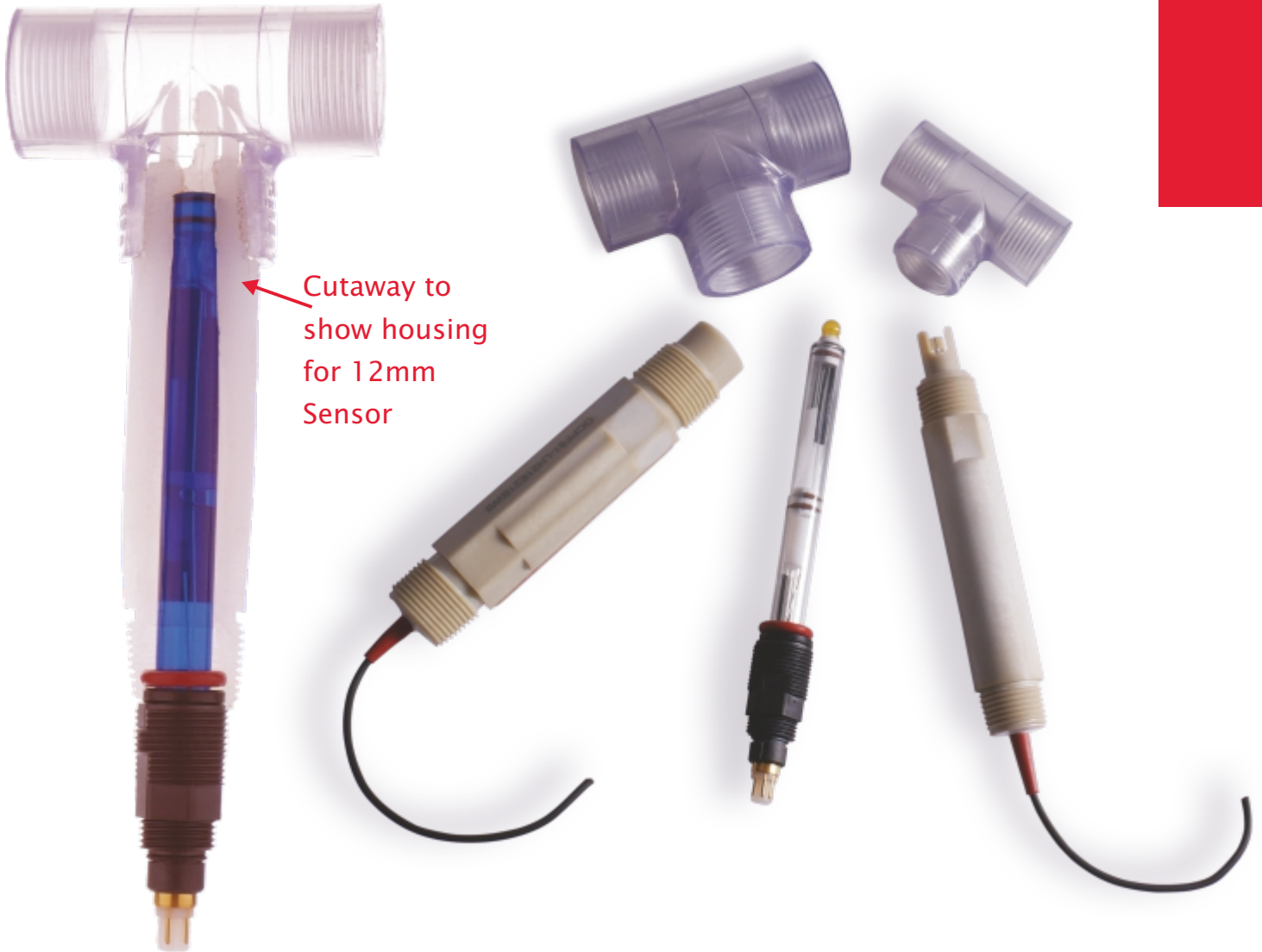
Please contact [info@edt.co.uk](mailto:info@edt.co.uk) or call +44 (0) 1304 600960 for your Process requirements.

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Multiple Fittings Available



For industrial & process enquiries email [edtdirection@gmail.com](mailto:edtdirection@gmail.com)



## pH Meters

Model	Description
S2K712	Pocket pH meter non Glass (Isfet)
S2K922	Pocket pH meter non Glass (Isfet)
QP451	Series 4 Portable pH/mV Meter
FE253	Portable pH Meter
FE253/Kit	Portable pH Meter and Accessories
FE257	Portable pH Meter
FE257/Kit	Portable pH Meter and Accessories
GP353-Kit	General Purpose Bench Meter and Accessories
QC355Tx-Kit	Quality Control Bench Meter and Accessories
RE357Tx-Kit	Research Bench Meter and Accessories
QP458	Series 4 Combined pH/mV/Conductivity/TDS/Temp Meter

## pH and REDOX ELECTRODES

E8080	Polymer Combination Electrode (EDT cap)
E8080NS	Polymer Bodied pH Combination Electrode With Fixed Skirt
E8081	Glass Combination Electrode (EDT cap)
E8082	pH Half Cell (For use with E8090 or E8094)
E8084	Penetration Combination Electrode
E8085	Low Conductivity pH Combination Electrode
E8086	Long Reach pH Combination Electrode
E8087	Flat Surface pH Combination Electrode
E8089	Combination, Refillable Polymer pH Electrode
E8100	Semi Micro pH Electrode
E8106	Glass Redox Combination Electrode

## REFERENCE ELECTRODES

E8090	Single Junction Calomel Reference Electrode
E8094	Double Junction Calomel Reference Electrode
E8095	Single Junction Ag/AgCl Reference Electrode
E8195	Double Junction Ag/AgCl Reference Electrode
A3135	Single Junction Gel filled Ag/AgCl Reference Electrode with BNC plug
5094	Flow Plus Reference Electrode
922/712REF	Replacement Reference Electrode for S2K922 and S2K712

## CATHODIC PROTECTION REFERENCE ELECTRODE

9999	Cathodic Protection Reference Electrode
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## Solutions and Accessories

### Filling and Storage Solutions

E8064	KCl Reference Electrode Fill Solution For Calomel References. 100ml.
E8122	KCl sat. Reference Electrode Fill Solution .500ml.
E8067	KCl sat. with Ag-AgCl, Reference Electrode Fill Solution .100ml.
A3136	pH Electrode Storage Solution. 500ml

### Buffer Solutions

A3007	50 pH 4 Capsules (makes up to 5 Litres)
A3018	50 pH 7 Capsules (makes up to 5 Litres)
A3094	50 pH 10 Capsules (makes up to 5 Litres)

A3096	10 pH 4 Capsules (makes up to 1 Litre)
A3097	10 pH 7 Capsules (makes up to 1 Litre)
A3099	10 pH 10 Capsules (makes up to 1 Litre)
A3144	Buffer Solution pH 4 Colour Coded Red. 500ml.
A3147	Buffer Solution pH7 Colour Coded Yellow. 500ml.
A3140	Buffer Solution pH10 Colour Coded Blue. 500ml.

#### Accessories

E8050	Temperature Probe for use with GP353
E8051	Temperature Probe for use with QC355Tx; RE357Tx; FE257.
E8052	Temperature Probe for use with FE253
E8060	Flexible Arm Stand for EDT Electrodes/Probes
E8061	Electrode Stand
A3054	Carry Case for Portable Meters
E8040	Mains Adaptor Multi
E8041	Mains Adaptor (UK)
E8042	Mains Adaptor (US)
E8043	Mains Adaptor (EU)

#### Ion Concentration Measurement

DR359Tx-Kit	Direct Readout Bench Ion Meter & Accessories
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#### Ion Selective Electrodes

Mono Electrodes (1/2 Cells) require a Ref. Electrode

1021	Nitrate Half Cell Ion Selective Electrode
1031	Potassium Half Cell Ion Selective Electrode
1041	Calcium Half Cell Ion Selective Electrode
1051	Ammonium Half Cell Ion Selective Electrode
1071	Nitrite Half Cell Ion Selective Electrode
1211	Silver Half Cell Ion Selective Electrode
1221	Fluoride Half Cell Ion Selective Electrode
1231	Lead Half Cell Ion Selective Electrode
1241	Cadmium Half Cell Ion Selective Electrode
1261	Chloride Half Cell Ion Selective Electrode
1271	Bromide Half Cell Ion Selective Electrode
1281	Iodide Half Cell Ion Selective Electrode
1291	Cyanide Half Cell Ion Selective Electrode
1225	Sulphide Half Cell Ion Selective Electrode
1227	Cupric Half Cell Ion Selective Electrode
1229	Thiocyanate Half Cell Ion Selective Electrode
1301	Sodium Half Cell Ion Selective Electrode
1301/G	Sodium Half Cell Ion Selective Electrode

#### Mini solid state half cell ISEs 7x8mm.

2021	Nitrate Mini Ion Selective Electrode
2031	Potassium Mini Ion Selective Electrode
2041	Calcium Mini Ion Selective Electrode
2051	Ammonium Mini Ion Selective Electrode
2071	Nitrite Mini Ion Selective Electrode

2211	Silver Mini Ion Selective Electrode
2221	Fluoride Mini Ion Selective Electrode
2231	Lead Mini Ion Selective Electrode
2241	Cadmium Mini Ion Selective Electrode
2261	Chloride Mini Ion Selective Electrode
2271	Bromide Mini Ion Selective Electrode
2281	Iodide Mini Ion Selective Electrode
2291	Cyanide Mini Ion Selective Electrode
2225	Sulphide Mini Ion Selective Electrode
2227	Cupric Mini Ion Selective Electrode
2229	Thiocyanate Mini Ion Selective Electrode
2301	Sodium Mini Ion Selective Electrode

#### Combination Ion Selective Electrodes

3021	Nitrate Combination Ion Selective Electrode
3031	Potassium Combination Ion Selective Electrode
3041	Calcium Combination Ion Selective Electrode
3051	Ammonium Combination Ion Selective Electrode
3071	Nitrite Combination Ion Selective Electrode
3211	Silver Combination Ion Selective Electrode
3221	Fluoride Combination Ion Selective Electrode
3231	Lead Combination Ion Selective Electrode
3241	Cadmium Combination Ion Selective Electrode
3261	Chloride Combination Ion Selective Electrode
3271	Bromide Combination Ion Selective Electrode
3281	Iodide Combination Ion Selective Electrode
3291	Cyanide Combination Ion Selective Electrode
3225	Sulphide Combination Ion Selective Electrode
3227	Cupric Combination Ion Selective Electrode
3229	Thiocyanate Combination Ion Selective Electrode
3301	Sodium Combination Ion Selective Electrode
3301/G	Sodium (Glass) Combination ISE
3302	Ammonia (NH <sub>3</sub> ) Gas Sensing Ion Selective Electrode

#### Flow Plus Combination Electrodes

5021	Nitrate Flow Plus Ion Selective Electrode
5031	Potassium Flow Plus Ion Selective Electrode
5041	Calcium Flow Plus Ion Selective Electrode
5051	Ammonium Flow Plus Ion Selective Electrode
5221	Fluoride Flow Plus Ion Selective Electrode
5261	Chloride Flow Plus Ion Selective Electrode

#### Flowcell Electrode Half cells & Accessories

4021	Nitrate Flowcell Ion Selective Electrode
4031	Potassium Flowcell Ion Selective Electrode
4041	Calcium Flowcell Ion Selective Electrode
4051	Ammonium Flowcell Ion Selective Electrode
4221	Fluoride Flowcell Ion Selective Electrode
4261	Chloride Flowcell Ion Selective Electrode
4081	pH. Glass Flow through half cell

4301	Sodium Flowcell Ion Selective Electrode
4001	Reference electrode flowcell
4444	Flowcell holder for up to 3 flowcells. With tubing and fittings.
4222	Flowcell cable / 1 m with BNC connector

#### Standard Solutions (500mL)

21321	Ammonia 1000ppm
21334	Ammonium 1000ppm
21312	Barium 1000ppm
21302	Bromide 1000ppm
21309	Cadmium 1000ppm
21310	Calcium 1000ppm
21323	Carbon Dioxide 1000ppm
21301	Chloride 1000ppm
21306	Copper 1000ppm
21333	Fluoride 1000ppm
21303	Iodide 1000ppm
21307	Lead 1000ppm
21311	Nitrate 1000ppm
21371	Nitrite 1000ppm
21314	Potassium 1000ppm
21308	Silver 1000ppm
21315	Sodium 1000ppm
21332	Thiocyanate 1000ppm

#### Ionic Strength Adjustment Buffers (ISAB).500mL

30321	Ammonia
30334	Ammonium
30312	Barium
30302	Bromide
30309	Cadmium
30310	Calcium
30301	Chloride
30306	Copper
30304	Cyanide
30333	Fluoride
30303	Iodide
30307	Lead
30311	Nitrate
30371	Nitrite
30314	Potassium
30308	Silver
30315	Sodium
30305	Sulphide
30332	Thiocyanate

#### Conductivity Measurement

QP481	Series 4 Portable Conductivity/TDS Meter
BA380-Kit	Basic Bench Conductivity Meter and Accessories
GP383-Kit	General Purpose Bench Conductivity Meter and Accessories

RE388Tx-Kit	Research Bench Conductivity Meter and Accessories
FE280/Kit	Portable Conductivity Meter and Accessories
FE287/Kit	Portable Auto Conductivity Meter and Accessories
QP458	Series 4 Combined pH/mV/Conductivity/TDS/Temp Meter

#### Conductivity Cells

E8071	Glass Dip Cell K=1/cm
E8070	Polymer Dip Cell K=1/cm
E8072	Glass Dip Cell K=0.1/cm
A5004	Epoxy Dip Cell K=10/cm
A5005	Glass Flow Cell K=1/cm
A5008	Epoxy Flow Cell K=10/cm
A5010	Epoxy Dip Cell K=1/cm
A5011	Epoxy Dip Cell K=0.1/cm
A5012	Epoxy Flow Cell K=1/cm
A5013	Epoxy Flow Cell K=0.1/cm
A5015	Glass Sample Cell K=0.1/cm
A5019	Epoxy Dip Cell K=1/cm (12mm body)
A6000	Conductivity low Volume (200µL) Flow Cell
A6000/ATC	Conductivity low Volume (200µL) Flow Cell With Built in ATC
Ext. Cable	Extra Cable/Per Metre up to 10 Metres Maximum Contact us for longer lengths.

#### Solutions and Accessories

A3052	1413 µS/cm Calibration Solution. 100ml
A3053	1413 µS/cm Calibration Solution. 500ml.
A3055	12,880 µS/cm Calibration Solution. 100ml
A3056	12,880 µS/cm Calibration Solution. 500ml
E8050	Temperature Probe for use with GP383
E8051	Temperature Probe for use with RE387Tx
E8060	Flexible Arm Stand for EDT Electrodes/Probes
E8061	Electrode Stand
A3054	Carry Case for Portable Meters
E8040	Mains Adaptor Multi
E8041	Mains Adaptor (UK)
E8042	Mains Adaptor (US)
E8043	Mains Adaptor (EU)
A3104	Calibration Plug for BA380 and GP383

#### Dissolved Oxygen Measurement

RE347Tx-Kit	Research Bench Dissolved Oxygen Meter and Accessories
FE247/Kit	Portable Auto Dissolved Oxygen Meter and Accessories

#### Cells & Accessories

E8025	Probe and Membrane for FE247 and RE347Tx
E8026	DO Filling Solution - 30mL
E8024	Box of 5 Membranes for E8025
E8060	Flexible Arm Stand for EDT Electrodes/Probes
A3054	Carry Case for Portable Meters
E8040	Mains Adaptor Multi
E8041	Mains Adaptor (UK)
E8042	Mains Adaptor (US)
E8043	Mains Adaptor (EU)



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### Green manufacturing

EDT directION are making strenuous efforts to reduce the environmental impact of our production activities at our Dover Technical centre. Though by no means complete we are proud of our Green Credentials.

### Keeping it Local

EDT directION Ltd are based on the picturesque Waldershare Park Estate in a rural part of East Kent. Though not known as a Manufacturing Hub all of our pH, Conductivity, Ion and Dissolved Oxygen meters are made on site. Components are all sourced locally. The new Series 4 Portable instruments were designed, developed and produced in Kent. Shipping, flying and transporting components around the globe has an environmental impact and this is one aspect of manufacturing that is within our control and we aim to minimise it wherever possible.

### Recyclable Packaging

EDT directION use only paper and recyclable packing materials including Paper Tape on all of our parcels and boxes. We are also looking at eliminating plastic document wallets and single use plastic in general. Our Electrode boxes are folded cardboard and do not contain Polystyrene, foam, tape or other non-recyclable materials.





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Web: [www.edt.co.uk](http://www.edt.co.uk)

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YouTube: [www.edt.co.uk/tv](http://www.edt.co.uk/tv)