

## **Electrochemistry Accessories**





## pH/ATC Electrodes

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#### A. pH & ATC Gel-Filled Electrode

Gel-filled reference with fiber junction, built-in bulb protector, pH 0 to 14 low resistance glass, temperature range -5°C to 80°C, BNC connector.

pH/ATC, Plastic, Gel-Filled	301560.1
pH, Plastic, Gel-Filled	301423.1

#### B. pH/ATC Plastic-body Electrode

300728.1

For routine pH measurements. pH range 0 to 14, Ag/AgCl reference with fiber junction. 3M KCl liquid-filled electrode, temperature range -5°C to 80°C. BNC and 2.5mm phone plug connectors.

#### C. High performance pH/ATC Glass-body Electrode -TRIS

300729.

For all pH measurements, including TRIS buffered solutions. Glass body, pH 0 to 14, low resistance break-resistant toughened glass, super-stable 3M KCI liquid-filled reference with non-clogging free-flow platinum junction, temperature range -5°C to 100°C. BNC and 2.5 mm phone plug connectors . Standard electrode for Denver 200 Series and UB-10 w/ Deluxe Bio-Kit

#### D. pH High performance Glass-body Electrode -TRIS

300731.1

For all pH measurements, including TRIS buffered solutions. Glass body, pH 0 to 14 low resistance break-resistant glass, super-stable 3M KCI refillable reference cartridge system with non-clogging free-flow platinum junction, BNC connector, temperature range -5°C to 100°C.

#### E. Micro Glass-body pH Electrode - TRIS

300736.1

For pH measurements, including TRIS buffered solutions, in narrow containers, test tubes and labware. Body diameter 0.20" (5mm), pH 0 to 14 low resistance glass, 3M KCI refillable reference system, BNC connector.

#### F. Sleeve-Junction pH Electrode

300738.1

For viscous or low ionic strength samples. pH 0 to 14, low resistance glass, liquid-filled 3M KCl reference, adjustable flow rate plastic sleeve junction, temperature range -5°C to 100°C, BNC connector.

#### G. Flat-Surface pH Electrode

300737.1

For pH measurements of small volumes or surfaces such as meats, cheese, leather or agar. Glass-body gel-filled sealed reference, pH 2 to 13 low resistance glass, temp. range -5°C to 50°C, BNC connector.

#### H. Plastic-body Gel-filled pH Electrode

300735.1

Low-maintenance, gel-filled reference with fiber junction, built-in bulb protector, pH 0 to 14 low resistance glass, temperature range -5°C to 80°C, BNC connector.

#### I. Automatic Temperature Compensating Probe

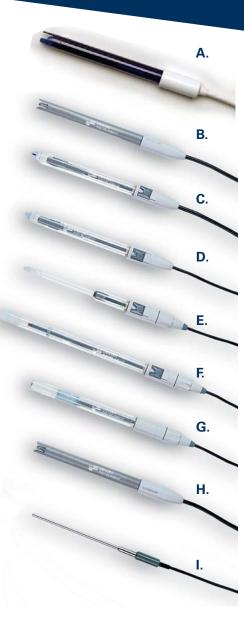
300733.1

For temperature measurement. Fast response stainless steel body, 0.2" (4.7mm) diameter, 4.7" (120mm) length. With 2.5mm phone plug connector.

#### J. Multi-Sense Conductivity/pH/ATC Cell (not shown)

<u>801058.1</u>

Includes a two-band platinum conductivity cell, combination pH electrode with a gel reference and an ATC temperature sensor. Plastic body, standard 12mm diameter and 120mm length. Cell constant 1.0 cm<sup>-1</sup>. BNC and multi-pin connectors for Denver 200 Series meters.





# Conductivity Cells and Ion-Selective Electrodes

#### **K. Conductivity Cells**

Four-band platinum band conductivity cells offer better linearity and improved accuracy, built-in temperature, plastic body, 12mm diameter, Removable outer body for cleaning. Multi-pin connector for Denver 200 Series meters.

0.5 cm <sup>-1</sup> (Range 0.5 - 2,000 μS)	301046.1
1 cm <sup>-1</sup> . (Range 10 - 5,000 μS)	301047.1
10 cm <sup>-1</sup> (Range 1,000 - 200,000 μS)	301048.1

#### L. Multi-range Graphite/Epoxy Body Conductivity Cell

Four band graphite target configuration offers a wider reading range of 1 to 300,000  $\mu$ S/cm . 15.3mm diameter epoxy body with built-in ATC that allows for automatic temperature compensation and temperature readings.

0.475 cm-1 (Reading Range 1 to 300,000 µS/cm)	VT-CTP-05
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#### M. Fluoride, Chloride and Silver/Sulfide Electrodes

Membranes are LaF3 single crystal membrane (F-), solid-state Ag2S/AgCl (Cl-) or solid-state Ag2S (Ag+/S--), refillable references are single junction (F-) or double junction (Cl- and Ag+/S--) with high flow rate plastic sleeve junctions for accurate measurements, durable epoxy body, BNC connector.

Fluoride Combination ISE	300739.1
Chloride Combination ISE	300742.1
Silver/Sulfide Combination ISE	300762.1

#### N. Nitrate, Potassium and Calcium Electrodes

Solvent-polymer PVC membrane technology. Built-in refillable reference electrodes are single junction (Ca<sup>++</sup>) or double junction (NO<sub>3</sub>- and K<sup>+</sup>) with high flow rate plastic sleeve junctions, durable epoxy body, BNC connector.

Nitrate Combination ISE	300743.1
Potassium Combination ISE	300744.1
Calcium Combination ISE	300745.1

#### O. Sodium Electrode

Combination ISE uses a sodium selective glass membrane. Built-in liquid-filled reference electrode, glass body, BNC connector.

#### P. Combination ORP Electrode

Measure ORP (Oxidation Reduction Potential, or Redox Potential) in samples such as industrial waters. Ag/AgCl reference with ceramic junction, large area platinum disc sensing element, BNC connector.

ORP (Redox) Combination ISE	300746 1

#### Q. Ammonia Electrode

Combination ISE uses a replaceable screw-on porousTeflon membrane. Epoxy body, BNC connector.

Ammonia ISE	300740.1
Replacement membranes (4/pack)	301252.1





## Chemicals and Accessories

### Chemicals

Denver Instrument offers high quality pH buffer reagents and filling solution. Buffers are solutions of known pH value that allow standardization of the electrode and meter. For the most accurate pH readings, standardization should be performed with fresh buffer solutions and in the pH range of the samples being tested. Available as individuals and in a Starter Pack.

#### A. Chemicals

pH 4 Buffer, 500 mL	PY-BU4	
pH 7 Buffer, 500 mL	PY-BU7	
pH 10 Buffer, 500 mL	PY-BU10	
3M KCl Solution, 50 mL	PY-RF3M	
Starter Pack	PY-3BURF	
Includes 1 each of the following: 500 mL pH 4, 7, 10 and 50 mL 3M KCl		

### Accessories

**B. Free-Standing Electrode Support** 

UltraBasic and Basic pH Meters	300401.1
Replacement Electrode Arms	
UltraBasic, Meridian, 200 Series Meters (white)	301324.1
UltraBasic, Meridian, 200 Series Meters (gray)	301325.1

#### **Bases and Brackets**

UltraBasic Meter base only	69TC0095
Meridian Meter bracket only	301559.1
200 Series Meter bracket only	69TC0372

#### RS-232-C Interface Cables (not shown)

Meridian Series Meter (9 pin to 9 pin computer)	YCC01-NM3
200 Series Meter with S/N: KOXXXX	601433.1
200 Series Meter with S/N: E2OXXXXXXX	YCC99-0005

#### C. Printer Kits

Features 4" print area, 28k buffer, graphics capability, parallel and serial ports. Complete with interface cable and 1 roll of printer paper.

Meridian Series Meter Dot Matrix Printer w/ cable	YDP02MR
200 Series MeterThermal Printer w/ cable (S/N: KOXXXX)	901543.1
200 Series Meter Dot Matrix Printer w/ cable (S/N: E2OXXXXXXX)	YDP06PH
Thermal Printer Paper 4.4" Width (1 roll/pkg)	901550.1
Dot Matrix paper (1 roll)	901044.1
Dot Matrix ribbon (1 per)	901045.1

#### D. Collect Software®

Connect the Meridian or 200 Series Meter to your PC for direct input of real-time data into spreadsheets (Collect is a registered trademark of Labtronics.)

Title Spreadsheets (confect is a registered trademark of Eabtronics.)	
Collect 6.1	902242.1
Collect SL	YSW04-0002

#### E. GLP Clip (Meridian Meters Only)

The innovative GLP Clip stores and displays the data from the last four calibrations as well as the initial calibration for a given electrode.

#### F. Electrode Storage Vessel

Store and protect your Denver electrode with this durable container.

Transformers and Power Supplies

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UltraBasic and Meridian Series Meters	102077.1
200 Series Metes with S/MN: E2OXXXXXXX	69TC0259
(Includes transformer with cord)	













D.









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Precision laboratory instruments since 1880

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