## **Rapid pH Electrodes**

**High Accuracy Research Grade pH Electrodes** 



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*Camlab Rapid* pH electrodes, unlike ordinary electrodes, provide fast, accurate, stable pH measurements, even with large sample temperature changes. All *Camlab Rapid* electrodes are combination types with built-in double reference junctions which keep silver ions from contacting samples. Undesirable reactions with heavy metals, sulfides, and proteins are eliminated. Using Super Liquid junctions further protects and refreshes the electrode for every use.





Simply push the spring loaded cap to instantly refresh the super-liquid junction.



Bulb Guard can be easily removed for cleaning.



All electrodes come with a special pre-conditioning storage bottle filled with storage solution to ensure your electrode is immediately ready to use when you need it.



# Fire & Ice

## **CAMLAB Rapid pH range**

- Fast response stable to 0.01 pH within 30 Seconds with temperature change of 35 to 75 Degrees C
- Accurate to 0.04 pH between 0-100 Degrees C
- Stable 0.005 pH or less drift per 24 hours
- Choose between Sealed or Refillable models
- Choose between Glass or Plastic body models

**Specifications** pH Range 0-14pH (0-12pH without sodium (Na) ion error)

Body material Plastic Epoxy or Glass

Max Temperature 100 Degrees C

Isopotential Point 7.0 pH

Slope 95-100%

Cable length 30 inches (76 cm)

Connectors BNC . US STD and other connectors are available for an extra charge.



www.camlab.co.uk

## **REFERENCE DESIGN SELECTION**

Rapid pH range electrodes are available with Sealed or with Super Liquid built-in reference half cell designs. SEALED designs are the most economical, are the easiest to use and they minimise maintenance. They have large area porous polyethylene junctions that resist clogging and are useful in a broad range of applications. SUPER LIQUID designs are re-fillable and designed to provide a fresh junction simply by pushing the spring loaded cap. They are ideal for dirty or complex samples that may cause junction fouling. These designs also include a TWIST-SEAL re-fill hole. A quarter turn of opens or closes the hole's leak-tight O-ring seat. The need for awkward rubber sleeves and screwed plugs is eliminated.

### **BODY MATERIAL SELECTION**

Rapid pH range electrode 12 mm diameter pH electrodes are offered in a choice of Epoxy or Glass bodies. Epoxy bodies provide maximum ruggedness and good chemical resistance. They are supplied with removable bulb guards which protect the pH bulb from breakage. The guard can be quickly removed to expose the bulb for cleaning. Replacement bulb guards can be ordered to fit any epoxy body RAPID electrode. GLASS bodies provide the maximum chemical resistance. Their pH bulbs are fully exposed but the ruggedised collar design makes them far more durable than standard designs.

### pH BULB SHAPE SELECTION

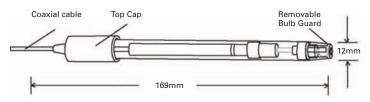
Rapid pH range electrodes with epoxy bodies and bulb guards have SPHERICAL bulbs. They are useful for a broad range of relatively clean samples. FLAT Surface designs have epoxy bodies (they do not have bulb guards). They are quite resistant to breakage since they do not have protruding bulbs. They make recommended for use with slurries. Glass body electrodes have RUGGEDISED pH bulbs that have hemispherical shapes. They are more resistant to breakage than spherical bulbs and can be used in a wide range of non-slurry applications.

## Rapid pH - Epoxy combination pH

## electrode with BNC connector and 1m cable

Research grade epoxy body combination pH electrode with double junction and removable bulb guard. The double junction provides added protection from contamination of the reference, providing a longer life. Ideal for samples with varying temperature.

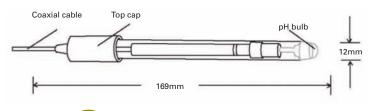
## Order number: 1161701



## **Rapid pH - Glass Super Liquid Junction combination pH** electrode with BNC connector and 1m cable

Research grade epoxy body combination pH electrode with double junction which provides added protection from contamination of the reference, providing a longer life. Ideal for samples with varying temperature.

#### Order number: 1161705

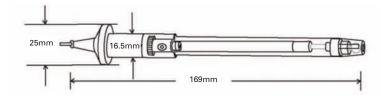


## Rapid pH - Epoxy Super Liquid Junction combination pH

electrode with BNC connector and 1m cable Research grade epoxy body combination pH electrode with Super Liquid junction design which allows you to flush the electrolyte to ensure purity and refresh the junction to give optimum readings time after time. Ideal for Lab and Field for a wide range of aqueous solutions, TRIS buffer, Photographic solutions, Beer, Wine, Liquor, samples containing heavy metals.

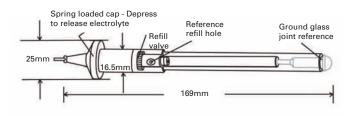
Order number: 1161702

2



## Rapid pH - Glass combination pH

electrode with BNC connector and 1m cable Research grade glass body combination pH electrode with Super Liquid junction design which allows you to flush the electrolyte to ensure purity and refresh the junction to give optimum readings time after time. Ideal for a wide range of liquids but particularly suitable for Beer, Wine, Liquors and Photographic solutions. Order number: 1161704



### **Rapid pH - Epoxy Flat combination pH** electrode with BNC connector and 1m cable

Research grade epoxy body flat surface combination pH electrode with double junction. The double junction provides added protection from contamination of the reference, providing a longer life. Flat surface pH glass is robust, easy to clean and ideal for hard to clean fluids, low volumes and tissue samples. Order number: 1161703

Coaxial cable Тор Сар Flat pH glass π 12mm HDPF

169mm

#### Accessories

Electrode Storage Bottle with integral rubber seal can be attached to your electrode and filled with a storage solution to keep your electrode in great condition so it is ready to use as soon as you need it. Order No. 1161708 Filling solution for Rapid Super Liquid Junction electrodes 100ml 3.5M KCL refill solution for Camlab Rapid Super Liquid Junction electrodes for

1161702 and 1161704 Order No. 1161709 Replacement bulb guard This guard fits the following Order No. 1161710

Camlab electrodes - 1161702, and 1161701

P US BNC DIN

Std

Connectors and Adapters Cables types Adapter Cable - BNR (BNC) to DIN M Single Pin (for connector) Suitable for Schott and WTW meters.

Order No.1161706 Adapter Cable - BNR (BNC) to US Standard Beckman (for connecting Camlab BNC electrodes to meters with a DIN M connector) Suitable for radiometer.

Order No.1161707

reference junction



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