

*The end of compromise ...*



*Introducing the new pH Meter  
that breaks the technological barrier!*

## THE CONTROL DYNAMICS pH METER

Control Dynamics presents a pH Meter that incorporates the latest technological advancements. It has a very high stability, reproducibility and a continuous duty cycle.

This Control Dynamics laboratory pH Meter incorporates an advanced C-Mos FET input operational amplifier and modular construction. It has a relative accuracy of  $\pm 0.01$  pH unit or  $\pm 1$  mV based on a low point calibration, repeatability of  $\pm 0.01$  pH unit or  $\pm 1$  mV and a stability (drift/24 hrs.) of less than 0.01 pH.

It provides a digital LED (Model APX 175 E) and LCD (Model APX 175 C) display of pH 0.00 to pH 14.00 in 0.01 pH unit or milli Volts from 0 to  $\pm 1999$  to-nearest 1 mV.

Automatically indicated on the digital display are decimal point, pH/mV mode and mV polarity.

The following controls are provided on the front panel:

A. Push button controls to select:

- Standby/Read position
- pH/mV measurements
- Manual/Automatic Temperature Compensation.

B. Dial controls:

- Temperature compensation control to read from  $-10^{\circ}\text{C}$ . to  $130^{\circ}\text{C}$ .
- Slope control for correcting Electrode slope
- Asymmetry control — adjustable span  $\pm 1$  pH by a 10 turn potentiometer, in steps of 0.01 pH.

The Control Dynamics pH Meter is a light-weight instrument with aluminium sheet metal housing and is epoxy painted.

Another unique feature is the two-dimensional electrode stand with a flexible spring balanced arm. A third socket is also provided for the optional auto temperature compensator.

Along with the pH Meter, we provide a combined electrode, electrode stand, electrode holder, buffers, wash bottle, a dust protective cover and a Handy Instruction Manual.

The ON/OFF Mains Switch is mounted on the back panel with a status flag. Also mounted on the back panel are plug-in sockets for Electrodes, Automatic Temperature Compensator, Recorder Output.

## CONTROL DYNAMICS DIGITAL pH METER

MODEL NOS. APX 175 E & APX 175 C.

SPECIFICATION	MODEL APX 175 E	MODEL APX 175 C
Display range	3½ Digits LED 7 Segment 0.5" Height 0.00 to 14.00 pH/0 to $\pm 1999$ mV	3½ Digits LCD 7 Segment 0.75" Height 0.00 to 14.00 pH/0 to $\pm 1999$ mV
Relative accuracy	$\pm 0.01$ pH/ $\pm 1.0$ mV	$\pm 0.01$ pH/ $\pm 1.0$ mV
Repeatability	$\pm 0.01$ pH/ $\pm 1.0$ mV	$\pm 0.01$ pH/ $\pm 1.0$ mV
Stability (drift/24 hrs.)	<0.01 pH after a warm-up period of 30 minutes non-cumulative	<0.01 pH after a warm-up period of 30 minutes non-cumulative
Slope adjustment	90 to 100% at $25^{\circ}\text{C}$	90 to 100% at $25^{\circ}\text{C}$
Asymmetry Potential	Adjustable $\pm 1$ pH by a 10-turn potentiometer	Adjustable $\pm 1$ pH by a 10-turn potentiometer
Temp. compensation: Automatic (with Compensator Probe APX. 160)	$-10^{\circ}\text{C}$ to $130^{\circ}\text{C}$	$-10^{\circ}\text{C}$ to $130^{\circ}\text{C}$
Manual	$-10^{\circ}\text{C}$ to $130^{\circ}\text{C}$	$-10^{\circ}\text{C}$ to $130^{\circ}\text{C}$
Input impedance	$>10^{14}$ Ohms	$>10^{14}$ Ohms
Polarizing current	10 Micro Amps.	10 Micro Amps.
Recorder output	0 to 100 mV full scale	0 to 100 mV full scale
Battery operation	No	Yes-6 Nos. 1.5V Cells Type Eveready 1015
Auto switch over from mains to battery during power failure.	No	Yes
Mains supply	230 V AC 50 Hz $\pm 10\%$	230 V AC 50 Hz $\pm 10\%$