

Bench type, SD Card real time data recorder

# pH/ORP METER

Model : BPH-241SD

ISO-9001, CE, IEC1010

[www.yalab.com.tw](http://www.yalab.com.tw)

02-2389-0101



**Lutron**

[www.YaLAB.com.tw](http://www.YaLAB.com.tw)

*The Art of Measurement*

Bench type, SD Card real time data recorder

# pH/ORP METER

Model : BPH-241SD

[www.YaLAB.com.tw](http://www.YaLAB.com.tw) 02-2389-0101

## FEATURE

- ✓ Bench type pH/ORP METER.
- ✓ Multi-function :  
pH measurement, ORP ( mV ) measurement.  
pH : 0 to 14.00 pH.  
ORP ( mV ) : -1,999 mV to 1999 mV.
- ✓ pH measurement can make the auto calibration for pH 7, pH 4 and pH 10 or other value.
- ✓ Separate probe, easy for operation of different measurement environment.
- ✓ Wide applications: water conditioning, aquariums, beverage, fish hatcheries, food processing, photography, laboratory, paper industry, plating industry, quality control, school & college, water
- ✓ Real time SD memory card Data logger, it Built-in Clock and Calendar, real time data recorder , sampling time set from 1 sec to 8 hour 59 min. 59 sec.
- ✓ Innovation and easy operation, computer is not need to setup extra software, after execute data logger, just take away the SD card from the meter and plug in the SD card into the computer, it can down load the all the measured value with the time information ( year/month/date/ hour/minute/ second ) to the Excel directly, then user can make the further data or graphic analysis by themselves.
- ✓ LCD with green light backlight, easy reading.
- ✓ Can default auto power off or manual power off.
- ✓ Microcomputer circuit, high accuracy.
- ✓ ATC ( automatic temperature compensation ).
- ✓ Data hold, Record ( Max., Min. ).
- ✓ RS232/USB computer interface.
- ✓ SD card capacity : 1 GB to 16 GB.
- ✓ Power by DC 1.5 V ( AA/UM-3 alkaline type ) battery x 6 PCs or DC 9V adapter in.
- ✓ Optional pH electrodes.

## GENERAL SPECIFICATION

Circuit	Custom one-chip of microprocessor LSI circuit.	
Display	LCD size : 56 mm x 97 mm LCD with green backlight ( ON/OFF ).	
Datalogger Sampling Time Setting range	Auto	1 sec to 8 hour 59 min. 59 sec. <i>@ Sampling time can set to 1 second, but memory data may loss.</i>
	Manual	Push the data logger button once will save data one time. <i>@ Set the sampling time to 0 second.</i> <i>@ Manual mode, can also select the 1 to 99 position ( Location ) no.</i>
Memory Card	SD memory card. 1 GB to 16 GB.	
Advanced setting	* SD memory card Format * Set clock time ( Year/Month/Date, Hour/Minute/ Second ) * Set sampling time * Auto power OFF management * Set beep Sound ON/OFF * Decimal point of SD card setting * Set temperature unit to °C or °F * Set pH manual Temp. compensation value	
Data Hold	Freeze the display reading.	
Memory Recall	Maximum & Minimum value.	
Sampling Time of	Approx. 1 second.	

Display	
Data Output	RS 232/USB PC computer interface. * Connect the optional RS232 cable UPCB-02 will get the RS232 plug. * Connect the optional USB cable USB-01 will get the USB plug.
Operating Temperature	0 to 50 °C .
Operating Humidity	Less than 85% R.H.
Power Supply	Power by DC 1.5 V ( AA/UM-3 alkaline type ) battery x 6 PCs or DC 9V adapter in.
Power Current	* w/o SD card and LCD Backlight is off : Approx. DC 14 mA. * When SD card save the data and LCD backlight is off. Approx. DC 34 mA. * If LCD backlight on, the power consumption will increase approx. 5 mA.
Weight	1400 g/3.08 LB.
Dimension	290 x 220 x 90 mm ( 11.5 x 8.7x 3.6 inch ) * <i>Meter only</i>
Accessories Included	* Instruction manual. 1 PC
Optional Accessories	* pH electrodes : PE-03, PE-11, PE-01, PE-06HD, PE-06HDA PE-04HD, PE-03K7, PE-02, PE-08, PE-21. * ATC probe for pH ( Automatic Temperature Probe ). TP-07. * pH 7 buffer solution PH-07, PH-07A. * pH 4 buffer solution PH-04, PH-04A. * ORP Electrode. ORP-14, ORP-15 * AC to DC 9V adapter. * USB cable, USB-01. * RS232 cable, UPCB-02. * Data Acquisition software, SW-U801-WIN. * SD memory card ( 4G ).

### ELECTRICAL SPECIFICATIONS (23± 5 °C)

pH Electrode	Optional, Any pH electrode with BNC connector.	
ORP Electrode	Optional, ORP-14, ORP-15.	
Measurement	pH	0 to 14 PH
	mV ( ORP )	-1999 mV to 1999 mV
Input Impedance	10 <sup>12</sup> ohm	
Temperature Compensation for pH measurement	Manual	0 to 100 °C , be adjusted by push button on front panel.
	Automatic ( ATC )	With the optional temperature probe ( TP-07 ) 0 to 65 °C .
pH Calibration	pH 7, pH 4, and pH 10, 3 points calibration ensure the best linearity and accuracy.	
Optional probe and accessories	pH electrodes	PE-03, PE-11, PE-01, PE-02, PE-08, PE-21, PE-06HDA, PE-04HD, PE-03K7.
		* ATC ( automatic temperature probe ). TP-07
		* pH 7 buffer solution PH-07, PH-07A
		* pH 4 buffer solution PH-04, PH-04A
	* ORP electrode. ORP-14, ORP-15	

Measurement	Range	Resolution	Accuracy
pH	0 to 14 pH	0.01 pH	± (0.02 pH + 2 d)
mV ( ORP )	-1999 to 1999 mV	1 mV	± (0.5% + 2 d)

\* Above accuracy is based on calibrated meter only.

ATC Temperature ( w/ optional probe , TP-07

Function	Measuring Range	Resolution	Accuracy
°C	0 °C to 60 °C	0.1 °C	± 0.8 °C
°F	32 °F to 140 °F	0.1 °F	± 1.5 °F
@ 23± 5°C			

\* Appearance and specifications listed in this brochure are subject to change without notice.

BPH-241SD+1702

**www.YaLAB.com.tw    02-2389-0101**