

SD Card, real time data logger, Patent, + ORP

pH METER

Model : PH-230SD

ISO-9001, CE, IEC1010



pH electrode (optional)



LUTRON ELECTRONIC

The Art of Measurement

SD Card real time data logger

pH METER

Model : PH-230SD

FEATURES

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| * pH : 0 to 14.00 pH, mV (ORP) : ± 1999 mV. |
| * pH measurement can select ATC or manual Temp. adj.. |
| * Optional ATC probe for pH measurement. |
| * pH measurement can make the auto calibration for pH 7, pH 4 and pH 10 or other value. |
| * Real time SD memory card Datalogger, it Built-in Clock and Calendar, sampling time set from 1 sec to 8 hour 59 min. 59 sec. |
| * Manual datalogger is available (set the sampling time to 0), during execute the manual datalogger function, it can set the different position (location) No. (position 1 to position 99). |
| * Innovation and easy operation, computer is not need to setup extra software, after execute datalogger, 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. |
| * SD card capacity : 1 GB to 16 GB. |
| * LCD with green light backlight, easy reading. |
| * Can default auto power off or manual power off. |
| * Data hold, record max. and min. reading. |
| * Microcomputer circuit, high accuracy. |
| * Power by UM3/AA (1.5 V) x 6 batteries or DC 9V adapter. |
| * RS232/USB PC COMPUTER interface. |
| * Wide applications: water conditioning, aquariums, beverage, fish hatcheries, food processing, photography, laboratory, paper industry, plating industry, quality control, school & college, water conditioning. |

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| 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 | * Alkaline or heavy duty DC 1.5 V battery (UM3, AA) x 6 PCs, or equivalent. * DC 9V adapter input. (AC/DC power adapter is optional). |
| Power Current | Normal operation (w/o SD card save data and LCD Backlight is OFF) : Approx. DC 14 mA. When SD card save the data and LCD Backlight is OFF) : Approx. DC 37 mA. * If LCD backlight on, the power consumption will increase approx. 12 mA. |
| Weight | 489 g/1.08 LB. |
| Dimension | 177 x 68 x 45 mm (7.0 x 2.7x 1.9 inch) |
| Accessories Included | * Instruction manual.....1 PC |
| Optional Accessories | * PH electrode..... PE-03, PE-11, PE-01, PE-02, PE-07, PE-06HD, PE-04HD, PE-05T, PE-03K7 * ATC Temp. probe.....TP-07 * pH 7 buffer solution..... PH-07 * pH 4 buffer solution..... PH-04 * ORP Electrode.....ORP-14 * Hard carrying case..... CA-06 * Soft carrying case..... CA-05A SD memory card (1 GB) SD memory card (2 GB) AC to DC 9V adapter. USB cable, USB-01. RS232 cable, UPCB-02. Data Acquisition software, SW-U801-WIN. |

GENERAL SPECIFICATIONS

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| Circuit | Custom one-chip of microprocessor LSI circuit. |
| Display | LCD size : 52 mm x 38 mm LCD with green backlight (ON/OFF). |
| Measurement Function | pH ORP (mV) |
| Datalogger Sampling Time Setting range | Auto 1 sec to 8 hour 59 min. 59 sec. @ Sampling time can set to 1 second, but memory data may loss. Manual Push the data logger button once will save data one time. @ Set the sampling time to 0 second. @ Manual mode, can also select the 1 to 99 position (Location) no. |
| 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 Display | Approx. 1 second. |

ELECTRICAL SPECIFICATIONS (23±5 °C)

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| pH Electrode | Optional, Any pH electrode with BNC connector. |
| Measurement | pH 0 to 14 pH mV -1999 mV to 1999 mV |
| Input Impedance | 10 ¹² 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 | pH7, pH4, and pH10, 3 points calibration ensure the best linearity and accuracy. |
| Measurement | Range Resolution Accuracy |
| pH | 0 to 14 pH 0.01 pH ± (0.02 pH + 2 d) |
| mV (ORP) | 0 to 1999 mV 1 mV ± (0.5% + 2 d) |
| * pH accuracy is based on calibrated meter only. | |

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| PATENT | CHINA : ZL 2008 2 0189918.5 ZL 2008 2 0189917.0 Germany : Nr. 20 2008 016 337.4 JAPAN : 3151214 | TAIWAN : M 358970 M 359043 U.S.A. : Pending |
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* Appearance and specifications listed in this brochure are subject to change without notice.