

*SD card real time data recorder, + TDS, Salt
20 uS/200 uS/2 mS/20 mS/200 mS*

PRECISION CONDUCTIVITY METER

Model : CD-4318SD

ISO-9001, CE, IEC1010

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02-2389-0101



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The Art of Measurement

SD card real time data recorder Pt glass electrode 20.00 uS/200.0 uS/2 mS/20 mS/200 mS CONDUCTIVITY METER TDS, Salt Model : CD-4318SD

FEATURES

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| * Functions : Conductivity, TDS, Salt, Temp. |
| * Pt glass electrode, high performance for the low conductivity (pure water) conductivity measurement. |
| * High conductivity resolution, 5 ranges : 20 uS x 0.01 uS, 200 uS x 0.1 uS, 2 mS x 0.001 mS, 20 mS x 0.01 mS, 200 mS x 0.1 mS |
| * TDS measurement, 5 ranges : 20/200/2,000/20,000/200,000 PPM. |
| * Automatic temp. compensation. |
| * It can select Temp. Coefficient of measurement solution. |
| * Separate probe, easy for operation of different measurement environment. |
| * Real time SD memory card Datalogger, built-in Clock and Calendar, sampling time can set from 1 sec to 8 hour 59 min. 59 sec. |
| * Manual datalogger is available, during execute the manual datalogger function, it can set the different 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. |
| * It 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: PCB industries, water conditioning, aquariums, beverage, fish hatcheries, food processing, photography, laboratory, paper industry, plating industry, quality control, school & college, water conditioning. |

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| Operating Temperature | Meter | 0 to 50 °C. |
| | Probe | 0 to 60 °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) : <i>Approx. DC 14 mA.</i> | |
| | When SD card save the data and LCD Backlight is OFF) : <i>Approx. DC 37 mA.</i> | |
| | * <i>If LCD backlight on, the power consumption will increase approx. 12 mA.</i> | |
| Weight | 489 g/1.08 LB. | |
| Dimension | Meter | 177 x 68 x 45 mm (7.0 x 2.7 x 1.9 inch) |
| | Probe | Round, 12 mm Dia. x 157 mm length. |
| Accessories Included | * Instruction manual.....1 PC * Conductivity/TDS/Salt probe, CDPB-04.....1 PC * Hard carrying case (CA-06)1 PC | |
| Optional Accessories | * 1.413 mS Conductivity Standard Solution.....CD-14 | |
| | SD memory card AC to DC 9V adapter. USB cable, USB-01. RS232 cable, UPCB-02. Data Acquisition software, SW-U801-WIN. Excel data Acquisition software, SE-E802. | |

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 | * Conductivity (uS, mS) * TDS (Total Dissolved Solids, PPM) * Salt (% Weight) * Temperature (°C, °F) |
| Temperature Compensation | Automatic from 0 to 60 °C (32 - 140 °F), with temperature compensation factor variable between 0 to 5.0% per C. |
| Conductivity Probe | Carbon rod electrode for long life. |
| 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 CD temperature compensation factor |
| Data Hold | Freeze the display reading. |
| Memory Recall | Maximum & Minimum value. |
| Sampling Time of Display | Approx. 1 second. |
| 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. |

ELECTRICAL SPECIFICATIONS (23± 5 °C)

Conductivity (uS, mS)

| Range | Measurement | Resolution | Accuracy |
|---|-----------------|------------|---------------------------------------|
| 20 uS | 0 to 20.00 uS | 0.01 uS | ± (2% F.S.+1d) * F.S. - full scale |
| 200 uS | 0 to 200.0 uS | 0.1 uS | |
| 2 mS | 0.2 to 2.000 mS | 0.001 mS | |
| 20 mS | 2 to 20.00 mS | 0.01 mS | |
| 200 mS | 20 to 200.0 mS | 0.1 mS | |
| * Temperature Compensation : Automatic from 0 to 60 °C (32 - 140 °F), with temperature compensation factor variable between 0 to 5.0% per C. * The accuracy is specified under measurement value ≤ 100 mS. * mS - milli Simens * @ 23± 5°C | | | |

TDS (Total Dissolved Solids)

| Range | Measurement | Resolution | Accuracy |
|---|-----------------------|------------|---------------------------------------|
| 20 PPM | 0 to 13.2 PPM | 0.01 PPM | ± (2% F.S.+1d) * F.S. - full scale |
| 200 PPM | 0 to 132 PPM | 0.1 PPM | |
| 2,000 PPM | 132 to 1,320 PPM | 1 PPM | |
| 20,000 PPM | 1,320 to 13,200 PPM | 10 PPM | |
| 200,000 PPM | 13,200 to 132,000 PPM | 100 PPM | |
| * Temperature Compensation : Automatic from 0 to 60 °C (32 - 140 °F), with temperature compensation factor variable between 0 to 5.0% per C. * The accuracy is specified under measurement value ≤ 66,000 PPM. * PPM - parts per million * @ 23± 5°C | | | |

Temperature

| 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 | | | |

Salt

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|-------------------|--|
| Measurement Range | 0 to 12 % salt (% weight). |
| Resolution | 0.01 % salt. |
| Accuracy | 0.5 % salt value * F.S. : full scale. |

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| PATENT | CHINA : ZL 2008 2 0189918.5 ZL 2008 2 0189917.0 Germany : Nr. 20 2008 016337.4 | 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.

1804-CD4318SD