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* 











The Art of Measurement

# PRECISION CONDUCTIVITY METER

Model: CD-4318SD

### **FEATURES**

*	One meter for multi purpose operation :
	Conductivity, TDS ( Total dissolved solids ), Salt measurement.
*	Conductivity: 20 uS/ 200 uS/2 mS/20 mS/200 mS.
*	Salt: 0 to 12 % salt ( % weight ).
*	Conductivity measurement can select Temp. Coefficient
	of measurement solution.
*	ATC for the conductivity measurement.
*	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 3600 seconds
*	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, thenuser 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: water conditioning, aquariums, beverage,
	fish hatcheries, food processing, photography, laboratory,
	paper industry, plating industry, quality control, school &
	college, water conditioning.

Operating	Meter	0 to 50 ℃.		
Temperature	Probe	0 to 60 ℃.		
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			
		LCD Backlight is OFF) :		
	Approx. DC 6 mA.			
	When SD card save the data and LCD			
	Backlight is OFF):			
	Approx. DC 37 mA.			
	* If LCD backlight on, the power			
) A ( - !!- +	sumption will increase approx. 12 mA.			
Weight Dimension	489 g/1.08 LB.			
Dimension	Meter 177 x 68 x 45 mm			
	Probe	(7.0 x 2.7x 1.9 inch)		
	Probe	Round,		
Accessories	* Instru	22 mm Dia. x 120 mm length.		
Included	* Instruction manual			
CDPB-04				
	* Hard carrying case ( CA-06 ) 1 PC			
Optional		1.413 mS Conductivity Standard Solution, CD-14		
Accessories   SD memory card ( 2 GB )   CD-14				
710003301103	AC to DC 9V adapter.			
	USB cable, USB-01.			
	RS232 cable, UPCB-02.			
	Data Acquisition software, SW-U801-WIN.			
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### **GENERAL SPECIFICATIONS**

Circuit	Custom one-chip of microprocessor LSI circuit.			
Display	LCD size	: 52 mm x 38 mm		
. ,	LCD with green backlight ( ON/OFF ).			
Measurement	* Conductivity ( uS, mS )			
Function	* TDS ( Total Dissolved Solids, PPM )			
	* Salt ( 9	% Weight)		
		rature ( °C ,°F)		
Temperature	Automati	c from 0 to 60 °C (32 - 140 °F),		
Compensation	with tem	perature compensation factor		
·	variable between 0 to 5.0% per C.			
Conductivity	Pt glass 6	electrode, high performance for the low		
Probe		vity ( pure water ) measurement.		
Datalogger	Auto	1 sec to 3600 sec.		
Sampling Time		@ Sampling time can set to 1 second,		
Setting range		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	* Set clock time			
		ear/Month/Date,Hour/Minute/ Second )		
	* Set sampling time			
* Auto pov		ower OFF management		
	* Set beep Sound ON/OFF			
	* Decimal point of SD card setting			
	* SD memory card Format			
	* Set ter	mperature unit to °C or °F		
	* Set CD temperature compensation factor			
	* Set probe CELL K Value			
Data Hold	Freeze the display reading.			
Memory Recall	Maximum & Minimum value.			
Sampling Time	Approx. 1 second.			
of Display				
Data Output RS 2		232/USB PC computer interface.		
		ct the optional RS232 cable		
	UPCB-	02 will get the RS232 plug.		
	* Conne	ct the optional USB cable		
	USB-01 will get the USB plug.			
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### ELECTRICAL SPECIFICATIONS (23±5°C)

## Conductivity ( uS, mS )

Range	Measurement	Resolution	Accuracy	
20 uS	0 to 20.00 uS	0.01 uS		
200 uS	0 to 200.0 uS	0.1 uS	± (2% F.S.+1d)	
2 mS	0.2 to 2.000 mS	0.001 mS		
20 mS	2 to 20.00 mS	0.01 mS	* F.S. : full scale	
200 mS	20 to 200.0 mS	0.1 mS	full scale	
* Tempera	* Temperature Compensation :			
Automati	Automatic from 0 to 60 $^{\circ}\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$			
compensa	compensation factor variable between 0 to 5.0% per C.			

\* The accuracy is specified under measurement value  $\leq$  100 mS.

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TDS (Total Dissolved Solids)

Range	Measurement	Resolution	Accuracy
20 PPM	0 to 13.20 PPM	0.01 PPM	
200 PPM	0 to 132 PPM	0.1 PPM	± (2% F.S.+1d)
2,000 PPM	132 to 1,320 PPM	1 PPM	
20,000 PPM	1,320 to 13,200 PPM	10 PPM	* F.S. : full scale
200,000 PPM	13,200 to 132,000 PPM	100 PPM	

\* Temperature Compensation :

Automatic from 0 to 60  $^{\circ}$  ( 32 - 140  $^{\circ}$  F ), with temperature compensation factor variable between 0 to 5.0% per  $^{\circ}$  C.

\* The accuracy is specified under measurement value ≤ 66,000 PPM.

\* PPM - parts per million \* @ 23 $\pm$  5 $^{\circ}$ C

### Temperature

Function	Measuring Range	Resolution	Accuracy
$^{\circ}$ C	0 °C to 60 °C	0.1 ℃	± 0.8 ℃
°F	32 °F to 140 °F	0.1 °F	± 1.5 °F
* @ 23± 5℃			

### Salt

Measurement	0 to 12 % salt ( % weight ).
Range	-
Resolution	0.01 % salt.
Accuracy	± 0.5 % salt value

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