200 uS/2 mS/20 mS/200 mS, Real time data logger

CODUCTIVITY METER

Model: YK-2005CD ISO-9001, CE, IEC1010

www.yalab.com.tw

02-2389-0101







The Art of Measurement

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FEATURE

- Innovative feature with built-in automatic temperature compensation factor adjustable between 0 to 5.0% per $^{\circ}$ C.
- ✓ Wide range, 200 uS/2 mS/20 mS/200 mS.
- ✓ Selecting " 0% per °C " of Temp. Coefficient Adjust, allows you to take uncompensated conductivity readings (absolute conductivity measurement).
- ✓ Temperature compensation range : 0 to 50 °C.
- ✓ Carbon rod electrode for long life.
- ✓ Conductivity measurement (uS, mS) or TDS (Total Dissolved Solids, PPM) can be selected.
- ✓ Auto range or manual range can be selected.
- ✓ Real time data logger, build in clock (hour-min.-sec., year-month-date).
- ✓ Auto data record, 16,000 Data logger no.
- ✓ Wide sampling time adjustment range from two seconds to 8 hours 59 minutes 59 seconds.
- ✓ RS232 computer interface.
- Can default auto power off or manual power off.
- ✓ Super large LCD display with contrast adjustment for best viewing angle.
- Data hold, record max. and min. reading.
- ✓ Power by UM3 (1.5 V) x 4 batteries or DC 9V adapter.
- ✓ RS232 PC serial interface.
- ✓ 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 conditioning.

GENERAL SPECIFICATION

Circuit	Custom one-chip of microprocessor LSI circuit.			
Display	LCD size : 58 mm x 34 mm.			
Measurement	* Conductivity (uS, mS)			
	* TDS (Total Dissolved Solids, PPM)			
	* Temperature ($^{\circ}$ C , $^{\circ}$ F)			
Temperature Compensation	Automatic from 0 to 60 $^{\circ}\mathrm{C}$ (32 - 140 $^{\circ}\mathrm{F}$), with temperature compensation			
	factor variable between 0 to 5.0% per C.			
Conductivity Probe Structure	Carbon rod electrode for long life.			
Sampling Time of Data	2 sec to 8 hour 59 min. 59 sec.			
Logger	@ Auto datalogger			
Data Hold	Freeze the display reading.			
Memory Recall	Maximum & Minimum value.			
Power off	Auto shut off saves battery life or manual off by push button.			
	@ Can default auto power or manual power off.			
	@ When default auto power function, power will off automatically after			
	10 min., if no button be pressed.			
Sampling Time of display	Approx. 1 second.			
Data Output	RS 232 PC serial interface.			
Operating Temperature	0 to 50 $^{\circ}$ C Main instrument.			

	0 to 60 $^{\circ}\mathrm{C}$ - Conductivity probe only.		
Operating Humidity	Less than 80% R.H.		
Power Supply	DC 1,5 V battery (UM3) x 4 PCs, (Heavy duty type).		
* main instrume	DC 9V adapter input. @ AC/DC power adapter is optional.		
Power Current	Approx. DC 15.2 mA		
Weight	425 g/ 0.94 LB. @ Battery is included.		
Dimension	Main instrument : 203 x 76 x 38 mm		
	Conductivity PROBE : Round, 22 mm Dia. x 120 mm length.		
Accessories Included	Instruction manual 1 PC		
	Conductivity probe 1 PC		
	DC 3V silver battery, CR2032 1 PC		
	Carrying case1 PC		
Optional Accessories	* 1.413 mS Conductivity Standard Solution		
	* AC to DC 9V adapter.		
	* RS232 cable/UPCB-02, USB cable/USB-01		
	* Data Acquisition software, SW-U801-WIN.		
	* Data Logger software, SW-DL2005.		

ELECTRICAL SPECIFICATIONS (23±5 °C)

A.Conductivity

Range	Measurement	Resolution	Accuracy	
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	* F.S Full scale	
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 $\,^\circ\!\!C$ (32 140 $\,^\circ\!\!F$), with temperature compensation factor variable between 0 to 5.0% per C.
- * The accuracy is specified under measurement value \leq 100 mS.
- * mS milli Simens * @ 23 \pm 5 $^{\circ}$ C

B.TDS (Total Dissolved Solids)

Range	Measurement	Resolution	Accuracy
200 PPM	0 to 132 PPM	0.1 PPM	
2,000 PPM	132 to 1,320 PPM	1 PPM	± (2% F.S.+1d)
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 $\,^\circ\!\!\mathcal{C}$ (32 140 $\,^\circ\!\!\mathcal{F}$), with temperature compensation factor variable between 0 to 5.0% per $\,^\circ\!\!\mathcal{C}$.
- * The accuracy is specified under measurement value \leq 66,000 PPM.
- * PPM parts per million * @ 23 \pm 5 \mathcal{C}

C.Temperature

Function	Measuring Range	Resolution	Accuracy	
$^{\circ}$ C	0 °C to 60 °C	0.1 °C	0.8 ℃	
°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.