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

CODUCTIVITY METER

Model : YK-2005CD

ISO-9001, CE, IEC1010

Lutron

LUTRON ELECTRONIC

The Art of Measurement

200 uS/2 mS/20 mS/200 mS, TDS (PPM)
Real time data logger, 16000 Data logger no., RS232

CONDUCTIVITY METER

Model : YK-2005CD

1. FEATURES

* Innovative feature with built-in automatic temperature compensation factor adjustable between 0 to 5.0% per ℃.
* Wide range, 200 uS/2 mS/20 mS/200 mS.
* Selecting " 0% per ℃ " of Temp. Coefficient Adjust, allows you to take uncompensated conductivity readings (absolute conductivity measurement).
* Temperature compensation range : 0 to 50 ℃.
* 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 or manual 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.

2-1 General Specifications

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 (℃,℉)	
Temperature Compensation	Automatic from 0 to 60 ℃ (32 - 140 ℉), 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 Logger	Manual	Push the data logger button once will save data one time. *@ Set the sampling time to 0 second*
	Auto	2 sec to 8 hour 59 min. 59 sec.
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 ℃. - Main instrument. 0 to 60 ℃ - Conductivity probe only.
Operating Humidity	Less than 80% R.H.
Power Supply ** main instrume*	DC 1,5 V battery (UM3) x 4 PCs, (Heavy duty type). DC 9V adapter input. *@ AC/DC power adapter is optional.*
Power Supply ** clock module*	DC 3V silver battery. Type : CR2032.
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 case.....1 PC
Optional Accessories	* 1.413 mS Conductivity Standard Solution * AC to DC 9V adapter. * RS232 cable, UPCB-02. * Data Acquisition software, SW-U801-WIN. * Data Logger software, SW-DL2005.

2-2 Electrical Specifications (23± 5 ℃)

A. Conductivity

Range	Measurement	Resolution	Accuracy
200 uS	0 to 200.0 uS	0.1 uS	± (2% F.S.+1d) * F.S. - Full scale
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 ℃ (32 - 140 ℉), 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℃*

B. TDS (Total Dissolved Solids)

Range	Measurement	Resolution	Accuracy
200 PPM	0 to 132 PPM	0.1 PPM	± (2% F.S.+1d) * F.S. - Full scale
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 ℃ (32 - 140 ℉), with temperature compensation factor variable between 0 to 5.0% per ℃.
** The accuracy is specified under measurement value ≦ 66,000 PPM.*
** PPM - parts per million * @ 23± 5℃*

C. Temperature

Function	Measuring Range	Resolution	Accuracy
℃	0 ℃ to 60 ℃	0.1 ℃	0.8 ℃
℉	32 ℉ to 140 ℉	0.1 ℉	1.5 ℉

** @ 23± 5℃*

* Appearance and specifications listed in this brochure are subject to change without notice. 0509-YK2005CD