CONDUCTIVITY/TDS/SALT METER

Model: YK-22CTA ISO-9001, CE, IEC1010











The Art of Measurement

CONDUCTIVITY/TDS/SALT METER

Model: YK-22CTA <u>www.YaLAB.com.tw</u> 02-2389-0101

FEATURE

- ✓ One meter for one purpose operation : CD, TDS, Salt measurement.
- ✓ Conductivity: 200 uS/2 mS/20 mS/200 mS.
- ✓ Salt : 0 to 12 % salt (% weight).
- ✓ Conductivity measurement can select uS/mS or TDS
- ✓ Conductivity measurement can select Temp. Coefficient of measurement solution.
- ✓ ATC for the conductivity measurement.
- ✓ Measurement for conductivity and temperature at same time.
- ✓ 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.
- ✓ 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.
- ✓ DC 1.5V (UM-3, AA) x 6 PCs or DC 9V adapter in.

GENERAL SPECIFICATION

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, Temperature, TDS(Total Dissolved Solids),Salt	
Advanced setting	* Auto power OFF management	
	* Set beep Sound ON/OFF	
	st Set temperature unit to $^\circ \! \mathbb{C} $ or $^\circ \! \mathbb{F} $	
	* Set CD temperature compensation factor	
	* Set CD to TDS or TDS to CD, CD only	
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.	
Operating Temperature	0 to 50 ℃.	
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 LCD Backlight is OFF) : Approx. DC 14 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 manual1 PC	
	* Hard carrying case (CA-06) 1 PC	
	* Conductivity/TDS/Salt probe, CDPB-03 1 PC	

Optional Accessories	* Pt Conductivity/TDS/Salt probe, CDPB-04	
·	* 1.413 mS Conductivity Standard Solution, CD-14	
	* AC to DC 9V adapter.	
	* USB cable, USB-01.	
	* RS232 cable, UPCB-02.	
	* Data Acquisition software, SW-U801-WIN.	
	* Excel Data Acquisition software,SW-e802	

ELECTRICAL SPECIFICATIONS (23±5 °C)

A. Conductivity/TDS

,,,		
Conductivity probe	Carbon rod electrode for long life, CDPB-03	
Function	* Conductivity (uS, mS)	
	* TDS (Total Dissolved Solids, PPM)	
	* Temperature ($^{\circ}$ C , $^{\circ}$ F)	
Temperature	Automatic from 0 to 60 $^{\circ}\mathrm{C}$ (32 - 140 $^{\circ}\mathrm{F}$), with temperature compensation	
Compensation	factor variable between 0 to 5.0% per C.	
Probe Operating Temp.	0 to 60 ℃.	
Probe Dimension	Round, 22 mm Dia. x 120 mm length.	
Optional probe and	* Pt Conductivity/TDS/Salt probe, CDPB-04	
accessories	* 1.413 mS Conductivity Standard Solution, CD-14	

Conductivity (uS, mS)

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 $^{\circ}\mathrm{C}$ (32 140 $^{\circ}\mathrm{F}$), 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±5°℃

TDS (Total Dissolved Solids)

Range	Measurement	Resolution	Accuracy
200 PPM	0 to 132 PPM	0.1 PPM	± (2% F.S.+1d)
2,000 PPM	132 to 1,320 PPM	1 PPM	* F.Sfull scale
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 $^{\circ}\! C$ (32 - 140 $^{\circ}\! F$), with temperature compensation factor variable between 0 to 5.0% per C.

- *he accuracy is specified under measurement value \leq 66, 000 PPM.
- *PPM parts per million
- * @ 23±5°C

Temperature

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

B. Salt

Salt probe	Carbon rod electrode for long life.	
Measurement Range	0 to 12 % salt (% weight).	
Resolution	0.01 % salt.	
Accuracy	0.5 % salt value * F.S. : full scale.	
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.	
Probe Operating Temperature	0 to 60 ℃.	
Probe Dimension	Round, 22 mm Dia. x 120 mm length.	
Optional probe and	* Pt Conductivity/TDS/Salt probe, CDPB-04	

^{*} Appearance and specifications listed in this brochure are subject to change without notice.

YK-22CTA+1603

www.YaLAB.com.tw 02-2389-0101