# CONDUCTIVITY/TDS/SAL1 METER

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









The Art of Measurement

# CONDUCTIVITY/TDS/SALT METER

Model: YK-22CTA

#### **FEATURES**

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*	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 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	Conductivity, Temperature,
Function	TDS(Total Dissolved Solids), Salt
Advanced	* Auto power OFF management
setting	* Set beep Sound ON/OFF
Setting	* Set temperature unit to °C or °F
	* Set CD temperature compensation factor
	* Set CD to TDS or TDS to CD, CD only
Data Hold	
Memory Recall	Freeze the display reading.  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	0 to 50 ℃.
Temperature	
Operating Humidity	Less than 85% R.H.
Power Supply	* Alkaline or heavy duty DC 1.5 V battery
ower cuppiy	( 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	* Instruction manual1 PC
Included	* Hard carrying case ( CA-06 ) 1 PC
	* Conductivity/TDS/Salt probe,
	CDPB-03 1 PC
Optional	* Pt Conductivity/TDS/Salt probe,
Accessories	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℃)

## A. Conductivity/TDS

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

#### 1. Conductivity (uS, mS)

Range	Measurement	Resolution	Accuracy
200 uS	0 to 200.0 uS	0.1 uS	
2 mS	0.2 to 2.000 mS	0.001 mS	± (2% F.S.+1d)
20 mS	2 to 20.00 mS	0.01 mS	* F.S.: full scale
200 mS	20 to 200.0 mS	0.1 mS	
* Temperature Compensation :			
1	:		

- 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 ≤ 100 mS.
- \* mS milli Simens
- \* @ 23± 5°C

# 2. 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
200,000 PPM	13,200 to 132,000 PPM	100 PPM	full scale
* Temperature Compensation :			
Automatic from 0 to 60 $^{\circ}\mathrm{C}$ ( 32 - 140 $^{\circ}\mathrm{F}$ ), with			

- 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℃

### 3. Temperature

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

# B. Salt

Salt	Carbon rod electrode for long life.
probe	
Measurement	0 to 12 % salt ( % weight ).
Range	
Resolution	0.01 % salt.
Accuracy	0.5 % salt value
_	* F.S. : full scale.
Temperature	Automatic from 0 to 60 $^{\circ}$ C (32 - 140 $^{\circ}$ F),
Compensation	with temperature compensation factor
-	variable between 0 to 5.0% per C.
Probe	0 to 60 ℃.
Operating	
Temperature	
Probe	Round, 22 mm Dia. x 120 mm length.
Dimension	-
Optional	* Pt Conductivity/TDS/Salt probe,
probe and	CDPB-04

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