

# CONDUCTIVITY/TDS/SALT METER

Model : YK-22CTA

ISO-9001, CE, IEC1010

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02-2389-0101



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*The Art of Measurement*

# CONDUCTIVITY/TDS/SALT METER

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## 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 * Set temperature unit to °C or °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 °C.
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 manual.....1 PC * Hard carrying case ( CA-06 )..... 1 PC * Conductivity/TDS/Salt probe, CDPB-03..... 1 PC

Optional Accessories	<ul style="list-style-type: none"> <li>* Pt Conductivity/TDS/Salt probe, CDPB-04</li> <li>* 1.413 mS Conductivity Standard Solution, CD-14</li> <li>* AC to DC 9V adapter.</li> <li>* USB cable, USB-01.</li> <li>* RS232 cable, UPCB-02.</li> <li>* Data Acquisition software, SW-U801-WIN.</li> <li>* Excel Data Acquisition software,SW-e802</li> </ul>
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**ELECTRICAL SPECIFICATIONS (23± 5 °C)**

**A. Conductivity/TDS**

Conductivity probe	Carbon rod electrode for long life, CDPB-03
Function	<ul style="list-style-type: none"> <li>* Conductivity ( uS, mS )</li> <li>* TDS ( Total Dissolved Solids, PPM )</li> <li>* Temperature ( °C, °F )</li> </ul>
Temperature Compensation	Automatic from 0 to 60 °C (32 - 140 °F),with temperature compensation factor variable between 0 to 5.0% per C.
Probe Operating Temp.	0 to 60 °C.
Probe Dimension	Round, 22 mm Dia. x 120 mm length.
Optional probe and accessories	<ul style="list-style-type: none"> <li>* Pt Conductivity/TDS/Salt probe, CDPB-04</li> <li>* 1.413 mS Conductivity Standard Solution, CD-14</li> </ul>

**Conductivity ( uS, mS )**

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 °C ( 32 - 140 °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

**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 °C ( 32 - 140 °F ), with temperature compensation factor variable between 0 to 5.0% per C.  
 \* he accuracy is specified under measurement value ≤ 66, 000 PPM.  
 \* PPM - parts per million  
 \* @ 23± 5°C

**Temperature**

Function	Measuring Range	Resolution	Accuracy
°C	0 °C to 60 °C	0.1 °C	± 0.8 °C
°F	32 °F to 140 °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 °C (32 - 140 °F), with temperature compensation factor variable between 0 to 5.0% per C.
Probe Operating Temperature	0 to 60 °C .
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

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