# WATER HARDNESS PURE WATER METER

Model: PWH-303 *ISO-9001, CE, IEC1010* 



## **FEATURES:**

- \* Separate Pt glass electrode, high performance for pure water low conductivity measurement.
- \* Measurement water conductivity : 0 to 1999 uS .
- \* Measurement water hardness : 0 to 1000 ppm.
- \* Separate Meter with the probe, easy operation.
- \* Hold , Record ( max., min.).
- \* DC 1.5V battery ( UM-4/AAA ) x 4.
- \* Water conditioning, aquarium, food processing, photography, school, laboratory, industrial and quality control.





The Art of Measurement

#### Pen type

# **PURE WATER/HARDNESS METER**

Model: PWH-303

#### **FEATURES**

,	All in one pen type Pure water meter provides fast,			
L	accurate readings with digital reading.			
,	Pure water measurement ( uS ) or Hardness (ppm ) can			
L	be selected.			
,	Pure water : 2,000 uS.			
* Hardness : 1,000 ppm.				
,	* Pt glass electrode for long life and low conductivity			
L	measurement			
* Build in temperature sensor, ATC ( auto temperature				
L	compensation ).			
,	Temperature measurement, °C, °F.			
,	* LCD with two displays show conductivity and Temp.			
L	value at same time.			
,	* Data hold function for freezing the desired value.			
,	Auto power off to save the battery life.			
,	Records max. and min. value with recall.			
,	Microcomputer circuit, intelligent function, high accuracy.			
,	Compact size, light weight.			
,	Power supply by DC 1.5 V battery ( UM4/AAA ) x 4 PCs,			
,	Available for wide applications, such as aquarium,			
	beverage, fish hatcheries, food processing,			
	photography, laboratory, quality control, school &			
	colleges, swimming pools, water conditions.			

Dimension	190 x 40 x 40 mm (7.5 x 1.6 x 1.6 inch).		
Weight	171 g/0.38 LB.		
Standard	Instruction Manual1 PC		
Accessories	Pt glass Probe, CDPB-041 PC		
Optional	* Soft carrying case with sash		
Accessories	( 210 x 80 x 50 mm ), Model : CA-52A		
	* Hard carrying case		
	( 280 x 195 x 65 mm ), Model : CA-06		
	* 1.413 mS Conductivity Standard		
	Solution, Model : CD-14A		
	Solution, Woder : OD 1471		

#### ELECTRICAL SPECIFICATIONS (23±5 ℃)

#### Conductivity

Range	Measurement	Resolution	Accuracy
2000 uS	0 to 2000 uS	1 uS	± (3% F.S.+1d)
			* F.S Full scale

- \* Auto range.
- \* 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.

- \* uS micro Simens
- \* 23± 5℃

#### GENERAL SPECIFICATION

Display	LCD, size: 20 mm x 28 mm.		
Measurement	* Conductivity ( uS )		
	* Hardness (ppm )		
	* Temperature ( °C, °F)		
Ranges	Conductivity: 2000 uS		
	Hardness :1,000 ppm		
Accuracy	± (2% FS + 1 d)		
* 23 ± 5 °C	* FS : full scale		
Temperature	Automatic from 0 to 60 $^{\circ}\mathrm{C}$ (32 - 140 $^{\circ}\mathrm{F}$ ),		
Compensation	with temperature compensation factor		
	variable between 0 to 5.0% per C.		
Conductivity	Pt glass electrode for long life.		
Probe	and low conductivity measurement		
Structure			
Data Hold	Freeze the display reading.		
Memory Recall	Maximum & Minimum value.		
Sampling Time Approx. 0.8 second.			
Circuit	Custom one-chip of microprocessor LSI		
	circuit.		
Power off	Auto shut off saves battery life or		
	manual off by push button.		
	* Power will off automatically after		
	10 min., if no button be pressed.		
Operating	0 to 50 $^{\circ}\mathrm{C}$ ( 32 to 140 $^{\circ}\mathrm{F}$ ).		
Temperature			
Operating	Less than 80% RH.		
Humidity			
Power Supply	DC 1.5V battery ( UM-4/AAA ) x 4 PCs.		
Power	Approx. 5.7 mA.		
Consumption	and appositional listed in this breakure are subject		

### HARDNESS (ppm )

Range	Measurement	Resolution	Accuracy
1,000 ppm	0 to 1,000 ppm	1 ppm	± (3% F.S.+1d)
			* F.S Full scale
* ^ _			

- \* Auto range.
- \* 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.

- \* ppm parts per millic\* 23± 5°C
- \* 23± 5℃

#### Remark:

General the following table describes the water hardness measurement.

Conductivity(uS)	Hardness(ppm)	Water Hardness	
0-140	0-70	Very Soft	
140-300	70-150	Soft	
300-500	150-250	Slightly Hard	
500-640	250-320	Moderately Hard	
640-840	320-420	Hard	
Above 840	Above 420	Very Hard	

#### Temperature

Function	Measuring Range	Resolution	Accuracy
℃	0 ℃ to 60 ℃	0.1 ℃	0.8 ℃
°F	32 °F to 140 °F	0.1 °F	1.5 °F
* @ 23± 5℃			

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