

Digital Refractometer for Seawater Measurements

The MA887 is an optical instrument that helps determining the salinity of natural and artificial seawater, ocean water or brackish intermediates by measuring the refractive index. The digital refractometer eliminates the uncertainty associated with mechanical refractometers.



Specifications	MA887
Range	0 to 50 PSU 0 to 150 ppt 1.000 to 1.114 S.G. (20/20) 0 to 80°C / 32 to 176°F
Resolution	1 PSU 1 ppt 0.001 S.G. (20/20) 0.1°C / 0.1°F
Accuracy	±2 PSU ±2 ppt ±0.002 S.G. (20/20) ±0.3°C / 0.5°F
Light source	yellow LED
Sample cell	SS ring and flint glass prism
Temperature compensation	automatic between 10 and 40°C
Battery type	1 x 9V AA (included)
Battery life	5000 reading
Auto-shut off	after 3 minutes of non-use
Dimensions	192x102x67 mm
Weight	420 g

Ammonia, Iron & Phosphate Photometers

These user-friendly colorimeters give you direct readings in mg/L.

Ammonia detection in water treatment systems is especially important for aquarium owners and fish farmers. Ammonia is highly soluble in water and extremely toxic to fish. Fish farm owners must monitor and carefully control ammonia levels to ensure optimum water conditions for their stock. Milwaukee offers MI405 Ammonia photometer for medium concentrations.

Iron is naturally present in water supplies and therefore needs to be monitored both in potable and industrial applications. Milwaukee offers MI408 Iron photometer for this application.

Phosphates are present in natural waters in levels that normally do not pose any specific health threats to humans. However, excessive contamination of water courses from agricultural fertilizer or wastewater/effluent discharge happens more and more often which can result in excessive algae or plant growth. Milwaukee offers MI412 Phosphate meter.

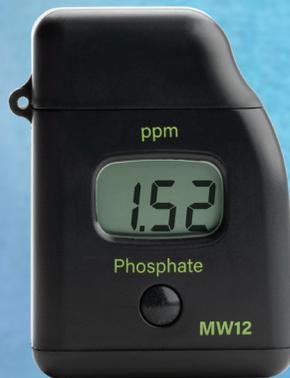


Specifications	MI405 PRO Ammonia MR	MI408 PRO Iron HR	MI412 PRO Phosphate LR
Range	0.00 to 9.99 mg/L	0.00 to 5.00 mg/L	0.00 to 2.50 mg/L
Resolution	0.01 mg/L	0.01 mg/L	0.01 mg/L
Accuracy	±0.30 mg/L @5.00 mg/L	±0.06 mg/L @1.50 mg/L	±0.07 mg/L @1.00 mg/L
Method	adaptation of Nessler method	adaptation of the USEPA method 315 B and Standard method 3500 - Fe B	adaptation of the Ascorbic Acid method
Light Source	Blue LED 466 nm	tungsten lamp	tungsten lamp
Light Detector	silicon photocell and 466 nm narrow band interference filter	silicon photocell and 525 nm narrow band interference filter	silicon photocell and 610 nm narrow band interference filter
Auto-off	after 10 minutes of non-use	after 10 minutes of non-use	after 10 minutes of non-use
Dimensions	192x104x52 mm	192x104x52 mm	192x104x52 mm
Weight	380 g	380 g	380 g

Low cost digital handy photometer

Milwaukee handy photometers are compact and easy to use with a modern design. The meter automatically turns off after 2 minutes of non-use in order to save battery life.

Phosphates are present in natural waters in levels that normally do not pose any specific health threats to humans. However, excessive contamination of water courses from agricultural fertilizer can result in excessive algae or plant growth. Milwaukee offers MW12 with a range of 0.00 to 2.50 mg/L.



Specifications	MW12 (Phosphate)
Range	0.00 to 2.50 ppm
Resolution	0.01 ppm
Accuracy (@25°C)	±0.04 ppm ±4% of reading
Typical EMC Dev.	±0.01 ppm
Light Source	LED @ 525 nm
Light Detector	Silicon Photocell
Dimensions	81.5 x 61 x 37.5 mm
Weight	64 g

Solenoid valve for CO₂ dosing



The MA955 solenoid valve is used in combination with our MC122 to automate your dosing of CO₂ and makes sure that the plants of your aquarium are always healthy.

The MC122 pH controller has a user selectable set point and will activate the solenoid valve when the reading is above or below the selected set point. Ideal for CO₂ or ozone dosing.

MA995 is supplied with 1 meter cable.

MA955 Solenoid valve	
Pressure range	0 – 5,5 bar
Bursting pressure	> 100 bar
Ambient temp.	max. + 50°C
Working temp.	-30°C to +140°C

Electrodes & Probes

Milwaukee has a wide range of pH, ORP, conductivity and temperature electrodes & probes to meet the need of any aquarium application. Glass-body or Epoxy-body electrodes are supplied with BNC connector, the length of cables vary from 1 to 3 meters depending on the type. The conductivity probes are supplied with DIN connector.

Electrodes & Probes	
SE220	Double junction pH electrode with 1 meter cable and gel filled electrolyte solution
SE300	Double junction ORP platinum electrode with 1 meter cable and gel filled electrolyte solution
SE510	Conductivity/TDS probe with 1 meter cable
SE520	Conductivity/TDS probe with 1 meter cable
SE600	Combination probe for pH/EC/TDS with 1 meter cable
MA911B/2	Double junction pH electrode with 2 meter cable and gel filled electrolyte solution
MA921B/2	Double junction ORP platinum electrode with 2 meter cable and gel filled electrolyte solution.
MA840	Polarographic DO probe with 3 meter cable
Mi56P	pH/Temp probe for pH55
Mi59P	EC/TDS probe for EC59 and EC60



Calibration, Maintenance and Cleaning Solutions



Solutions	
MA9020	200-275 mV ORP solution (230 mL)
MA9070	Zero oxygen solution (230 mL) for MW600
M1000AB	Combination pack of pH buffer solutions, including 10 sachets of M10007 (pH 7.01), 5 sachets of M10000 (rinse), 5 sachets of M10004 (pH 4.01), and 5 sachets of M10010 (pH 10.01); each sachet supplies 20 mL
M10004B	pH 4.01 Calibration Buffer Solution (box of 25x20 ml sachet)
M10007B	pH 7.01 Calibration Buffer Solution (box of 25x20 ml sachet)
M10010B	pH 10.01 buffer solution (box of 25x20 mL sachet)
M10016B	Cleaning solution for electrodes (box of 25x20 mL sachet)
M10030B	12.880 S/cm conductivity solution (box of 25x20 mL sachet)
M10031B	1413 µS/cm Conductivity Calibration Solution (box of 25x20 ml sachet)
M10032B	1332 ppm TDS solution (box of 25x20 mL sachet)
M10038B	6.44 ppt TDS solution (box of 25x20 mL sachet)

Milwaukee standard solutions are available in 230 mL bottles and 20 mL sachets. Traditional buffer solutions are packed in 230 mL leak-proof bottles and are recommended for lab applications. Sachets are sealed against light and air and are ideal for on-the-spot calibration. Sachets are sold in boxes of 25 pieces.

Authorized Distributor

milwaukee

MADE IN EUROPE

WATER ANALYSIS INSTRUMENTS FOR FRESH AND MARINE WATER



pH
ORP

Dissolved Oxygen

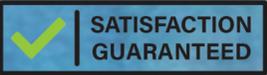
EC * TDS * Salinity

LUX * Temperature

Phosphate * Ammonia * Iron

Free & Total Chlorine * Iodine

www.milwaukeeinstruments.com



pH/ORP Controllers

Plants take in CO₂ during the day and release oxygen. During photosynthesis plants use the energy in sunlight to convert CO₂ and water to sugar and oxygen. With the **MC122** pH controller you can automate your dosing of CO₂ and make sure that the plants in your aquarium are always healthy.

The **MC510** ORP controller can be connected to an ozone generator and dose until the mV set point is reached.



Specifications	MC122 PRO	MC510 PRO
Range	0.0 to 14.0 pH	±1000 mV
Resolution	0.1 pH	1 mV
Accuracy (@25°C)	±0.2 pH	±5 mV
Set point	5.5 to 9.5 pH	0 to 600 mV
Alarm	active when measurement is higher or lower than selected set point	
Electrode	MA911B/2	MA921B/2
Dimensions	148 x 82 x 32	148 x 82 x 32
Weight	180 g	180 g

pH & ORP Controller

With **MC125** you can monitor and control pH and ORP levels. **MC125** has a user selectable set point and LED notification light which shows if the output power socket is active. The output power socket is turned on when the reading is above or below the selected set point. MC125 is ideal for CO₂ or ozone dosing. This could be controlled by a solenoid valve.

Specifications	MC125 PRO
Range	0.00 to 14.00 pH, ±1000 mV
Resolution	0.1 pH, 1 mV
Accuracy (@25°C)	±0.2 pH, ±5 mV
Set point pH	4 to 8 pH
Set point ORP	-200 to 600 mV
Alarm	active when measurement is higher or lower than selected set point
pH Electrode	MA911B/2
ORP Electrode	MA921B/2
Environment	0 to 50°C, max RH 95%
Packaging dimensions	276 x 129 x 138 mm
Packaging weight	1,4 kg



Continuous pH Monitor

With **MC120** pH monitor allows you can continuously monitor pH values directly in your aquarium. This monitor has a user selectable set point and LED notification light which shows if the pH value is above or below the set point.



Specifications	MC120 PRO
Range	0.0 to 14.0 pH
Resolution	0.1 pH
Accuracy (@25°C)	±0.2 pH
Set point	5.5 to 9.5 pH
Alarm	active when measurement is higher or lower than selected set point
Electrode	MA911B/2
Dimensions	148 x 82 x 32
Weight	160 g

Portable pH/EC/TDS Meters

MW101 and **MW802** are compact Portable Meters. These handy and ergonomically designed portable meters are ideal for anyone who requires fast and reliable measurements while working on a low budget. **MW802** measures pH, EC and TDS with just one single probe.

Specifications	MW101 PRO	MW801 PRO
Range	pH 0.00 to 14.00 pH EC 0 to 1990 µS/cm TDS 0 to 1990 ppm	0.0 to 14.0 pH 0 to 1990 µS/cm 0 to 1990 ppm
Resolution	pH 0.01 pH EC 10 µS/cm TDS 10 ppm	0.1 pH 10 µS/cm 10 ppm
Accuracy (@25°C)	pH ±0.02 pH EC/TDS ±2% Full Scale	±0.2 pH ±2% Full Scale
Temperature Compensation	manual 0 to 50°C	automatic 0 to 50°C
Calibration	manual, 2 points	manual, 1 point
Electrode/Probe (incl.)	SE220	SE600
Battery (included)	1x9V alkaline	1x9V alkaline
Battery life	approx. 300h	approx. 300h
Dimensions	145x80x40 mm	185x82x45 mm
Weight	220 g (with bat.)	165 g (with bat.)



Portable Conductivity & TDS Meters

MW301, **MW401** and **MW402** are compact Conductivity and TDS Portable Meters. These handy and ergonomically designed portable meters are ideal for anyone who requires fast and reliable measurements while working on a low budget.

These portable meters are suitable for a wide range of applications, from educational, to agricultural and horticultural, as well as water and environmental analysis.

Each meter is supplied with a Conductivity/TDS probe with 1 meter cable, calibration solution, 9V battery and instructions.

Specifications	MW301 PRO	MW401 PRO	MW402 PRO
Range	0 to 1999 µS/cm	0 to 1999 mg/L (ppm)	0.0 to 10.0 g/L (ppt)
Resolution	1 µS/cm	1 mg/L (ppm)	0.1 g/L (ppt)
Accuracy (@25°C)	±2% Full Scale	±2% Full Scale	±2 Full Scale
Calibration	1413 µS/cm (M10031B)	1382 mg/L (M10032B)	6.44 g/L (M10038B)
Solutions (incl.)	SE510 (included)	SE510 (included)	SE520 (included)
Conductivity probe	SE510 (included)	SE510 (included)	SE520 (included)
Battery (included)	1x9V alkaline	1x9V alkaline	1x9V alkaline
Battery life	approx. 300h	approx. 300h	approx. 300h
Dimensions	145x80x40 mm	145x80x40 mm	145x80x40 mm
Weight	220 g (with battery)	220 g (with battery)	220 g (with battery)



Portable ORP, Dissolved Oxygen and LUX Meters

MW500 is a compact ORP meter, **MW600** is a compact Portable Dissolved Oxygen meter.

MW700 is a portable Lux meter for measuring light. Compared to the other products in the MW series, it has a smaller, more ergonomic form and lighter case design. It has a larger and easier to read LCD Display and long battery life. These handy and easy to use portable meters are ideal for anyone who requires fast and reliable measurements while working on a low budget.

Specifications	MW500 PRO	MW600 PRO	MW700 PRO
Range	±1000mV	0.0 to 19.9 mg/L	0.000 to 50000 Lux
Resolution	1 mV	0.1 mg/L	1 Lux, 10 Lux, 100 Lux
Accuracy (@25°C)	±5mV	±1.5% Full Scale	±6% of reading, ±1 digit
Calibration	manual on 2 points	manual on 2 points	manual on 2 points
Electrode/Probe (included)	SE300	MA840	silicon photodiode sensor
Battery (included)	1x9V alkaline	1x9V alkaline	1x9V alkaline
Battery life	approx. 300h	approx. 70h of use	approx. 150h of use
Dimensions	145 x 80 x 40 mm	145 x 80 x 40 mm	145 x 80 x 40 mm
Weight	220 g (with bat.)	220 g (with battery)	270 g (with sensor)



pH/EC & TDS Economical Pocket Testers and Thermometers

Milwaukee's economical testers are easy-to-use and low cost instruments for measuring pH, EC or TDS values quickly and reliably.

Measuring electrical conductivity is the best way of checking the amount of salt or dissolved solids (TDS) in water. Milwaukee provides a range of pocket testers that will allow you to measure from very low to very high conductivity solutions.

All EC/TDS testers compensate for the temperature variance automatically.

TH310 is a palm-sized, highly accurate thermometer, with easy-to-read display which shows clear readings at any angle.

Specifications	pH600	TH310
Range	0.0 to 14.0 pH	-50.0 to 150.0°C
Resolution	0.1 pH	0.1°C
Accuracy	±0.1 pH	±0.5°C
Calibration	manual, 1 point	
Dimensions	150 x 30 x 24 mm	66 x 50 x 25 mm
Weight	85 g	50 g

Specifications	CD601	CD610
Range	0 to 1990 µS/cm	0 to 10000 ppm
Resolution	10 µS/cm	100 ppm
Accuracy	±2% Full scale	±0.1 pH
Dimensions	150 x 30 x 24 mm	150 x 30 x 24 mm
Weight	85 g	85 g



Pocket size waterproof pH/EC/TDS/Temp Meters with replaceable electrode

These waterproof Pocket-size Meters features replaceable probes, temperature in °C or °F, automatic temperature compensation, battery level indicator, stability indicator, automatic shut-off and automatic calibration all in a floating, waterproof casing.

It is very fast and simple to replace the double junction electrode! The modular design makes it easy to replace the electrode and battery.



Specifications	pH55 PRO	EC59 PRO	EC60 PRO
Range	pH -2.0 to 16.0 pH EC 3999 µS/cm TDS 2000 ppm Temp -5.0 to 60.0°C	3999 µS/cm 2000 ppm 0.0 to 60.0°C	20.00 mS/cm 10.00 ppt 0.0 to 60.0°C
Resolution	pH 0.1 pH EC 0.1°C TDS 0.1°C	1 µS/cm 1 ppm 0.1°C	0.01 mS/cm 0.01 ppt 0.1°C
Accuracy (@25°C)	pH ±0.1 pH EC ±0.5°C TDS ±0.5°C	2% Full Scale 2% Full Scale ±0.5°C	2% Full Scale 2% Full Scale ±0.5°C
Calibration	automatic, 1 or 2 points	automatic, 1 point	automatic, 1 point
Probe (replaceable)	Mi56P	Mi59P	Mi59P
Dimensions	200 x dia 38 mm	200 x dia 38 mm	200 x dia 38 mm
Weight	100 g	100 g	100 g