

Digital Refractometer for Seawater Measurements



The **MA887** is an optical instrument that employs the measurement of the refractive index to determine the salinity of natural and artificial seawater, ocean water or brackish intermediates.

The digital refractometer eliminates the uncertainty associated with mechanical refractometers and is easily portable for ship, shore or home use.

The **MA887** refractometer is an optical device that is simple and quick to use. Samples are measured after a simple user calibration with distilled or deionized water. Within seconds, the refractive index and temperature are measured and converted into one of three popular measurement units; Practical Salinity Units (PSU), Salinity in parts per thousand (ppt), or Specific Gravity (S.G. (20/20)).

All conversion algorithms are based upon respected scientific publications using the physical properties of seawater (not sodium chloride). The temperature (in °C or °F) is also displayed on the large dual level display along with helpful message codes.

Key features include:

- Dual-level LCD
- Automatic Temperature Compensation (ATC)
- Easy setup and storage
- Battery operation with Low Power indicator (BEPS)
- Automatically turns off after 3 minutes of non-use

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
Measurement Time	approximately 1.5 seconds
Minimum Sample Volume	100 µL (cover prism totally)
Sample Cell	SS ring and flint glass prism
Temperature Compensation	automatic between 10 and 40°C (50 to 104°F)
Case Material	ABS
Battery Type	1 x 9V AA (included)
Battery Life	5000 reading
Auto-shut off	after 3 minutes of non-use
Packaging dimensions	268 x 122 x 118 mm
Packing weight	660 g

Ordering Information

MA887 is supplied in a carton box, complete with 9V battery, pipette and instruction manual. Optionally you can also order the refractometers in a hard carrying case (**MA752**).



Stainless Steel Sample Well and Prism

Place a few drops of the sample in the well and press the READ key.

Liquid Crystal Display (LCD)

Dual Level LCD with Primary and Secondary Display.

