



### SM100/SM101/SM102/SM500 Portable pH/ORP/Temp Meters

#### Smart portable meters with no frills!



Milwaukee's low cost durable meters for quick and reliable measurements.

Milwaukee's Smart meters are manufactured to be easy to use, practical and accurate. Ideal for the classroom, laboratory or for general field use.

- **SM100** performs pH measurements with a 0.1 pH resolution and with manual temperature compensation.
- **SM101** performs pH measurements with a 0.01 pH resolution and with manual temperature compensation.
- **SM102** is a microprocessor based pH/Temperature meter with extended range (-2.00 to 16.00 pH), Automatic Temperature Compensation, automatic calibration in 2 points and  $\pm 0.02$  pH accuracy.
- **SM500** performs ORP measurements with a range of  $\pm 1000$  mV.

All meters are supplied with pH or ORP electrodes and calibration solutions.



Specifications		 <b>SM100 pH Meter</b>	 <b>SM101 pH Meter</b>	 <b>SM102 pH/Temp Meter</b>	 <b>SM500 ORP Meter</b>
Range	pH/ORP Temp	0.0 to 14.0 pH	0.00 to 14.00 pH	-2.00 to 16.00 pH -5 to 70°C	$\pm 1000$ mV
Resolution	pH/ORP Temp	0.1 pH	0.01 pH	0.01 pH 0.1°C	1 mV
Accuracy (@25°C)	pH/ORP Temp	$\pm 0.2$ pH	$\pm 0.02$ pH	$\pm 0.02$ pH $\pm 0.5$ °C	$\pm 5$ mV
Typical EMC Deviation	pH Temp			$\pm 0.02$ pH $\pm 0.5$ °C	
Temperature Compensation		manual, 0 to 50°C	manual, 0 to 50°C	automatic, 0 to 70°C	
Calibration		manual, 2-point through offset and slope trimmers	manual, 2-point through offset and slope trimmers	automatic, at 1 or 2 points	
pH Electrode		MA911B/1 (included)	MA911B/1 (included)	MA911B/1 (included)	MA921B/1 (included)
ORP Electrode					
Temperature Probe				MA830R (included)	
Environment		0 to 50°C; max RH 95%	0 to 50°C; max RH 95%	0 to 50°C; max RH 95%	0 to 50°C; max RH 95%
Battery Type		1 x 9V alkaline (included)	1 x 9V alkaline (included)	1 x 9V alkaline (included)	1 x 9V alkaline (included)
Battery Life		approx. 300 hours of use	approx. 300 hours of use	approx. 300 hours of use	approx. 300 hours of use
Auto-off				after 8 minutes of non-use	
Dimensions		145 x 80 x 40 mm	145 x 80 x 40 mm	145 x 80 x 40 mm	145 x 80 x 40 mm
Weight		220 g (with battery)	220 g (with battery)	220 g (with battery)	220 g (with battery)

#### Accessories

- M10004B** pH 4.01 buffer solution 20 mL sachet (25 pcs)
- M10007B** pH 7.01 buffer solution 20 mL sachet (25 pcs)
- MA9004** pH 4.01 buffer solution, 230 mL bottle
- MA9007** pH 7.01 buffer solution, 230 mL bottle
- MA9015** Electrode storage solution, 230 mL
- MA9016** Electrode cleaning solution, 230 mL
- MA9020** 200-275 mV ORP solution, 230 mL bottle
- MA830R** Temperature probe

- MA911B/1** pH electrode with BNC connector and 1 m cable (will be replaced by **SE230**)
- SE230(\*)** pH electrode with BNC connector and 1 m cable
- MA921B/1** Platinum ORP electrode with 1 m cable (will be replaced by **SE310**)
- SE310(\*)** pH electrode with BNC connector and 1 m cable

(\*) Available from the 1<sup>st</sup> of September 2010

#### Ordering Information

**SM100** and **SM101** are supplied complete with a MA911B/1 pH electrode, pH 7.01 20 mL sachet of calibration solution, calibration screwdriver, 9V battery and instructions.

**SM102** is supplied complete with a MA911B/1 pH electrode, MA830R stainless steel temperature probe, pH 4.01 and pH 7.01 20 mL sachet of calibration solution, 9V battery and instructions.

**SM500** is supplied complete with a MA921B/1 platinum electrode, 9V battery and instructions.