Considerations for Water Conductivity Meters

(Models mentioned do not constitute endorsement. These meters are mentioned for the range of characteristics encompassed and for illustration purposes only).

There are a few factors to consider:

- Cost
- Probe directly attached to the meter or on a several foot cable
- Conductivity ranges available
- Accuracy
- How ambient is obtained (as an option to select or by calculation from the specific conductivity and water temperature readouts).

Here are some examples of meters:

YSI EcoSense EC300A Conductivity Meter
Cost: $290
Probe: on 4 to 10 m cable
Conductivity ranges: 0 - 500 uS/cm, 0 - 5000 uS/cm, 0 - 50 mS/cm, 0 - 200 mS/cm
Accuracy: + - 1% of reading plus 2 uS/cm for 0 - 500 uS/cm range; + - 1% of reading plus 5 uS/cm
Select either Automatic Temperature Compensated (ATC) for specific conductivity or ambient conductivity

EXtech EC400 Conductivity Meter
Cost: $88 - $105
Probe: directly on bottom of meter
Conductivity ranges: 0 - 200 uS/cm, 200 - 2000 uS/cm, 2 - 20 mS/cm
Accuracy: + - 2% of full range (so, for the 0 - 200 uS/cm range, that's + - 4 uS/cm)
ATC for specific conductivity only; however, also displays water temperature so you could calculate ambient conductivity

EXtech EC100 Conductivity Meter
Cost: $50
Probe: directly on bottom of meter
Conductivity ranges: 0 - 2000 uS/cm, 0 - 20 mS/cm
Accuracy: + - 1% of full range (so, for the 0 - 2000 uS/cm range, that's + - 20 uS/cm)
ATC for specific conductivity; however, the temperature coefficient can be set to zero thereby giving ambient conductivity output.

Oakton ECTestr 11+ Conductivity Meter
Cost: $112;
Probe: directly on bottom of meter
Conductivity ranges: 0 - 200 uS/cm, 0 - 2000 uS/cm, 0 - 20 mS/cm
Accuracy: + - 1% of full range (so, for the 0 - 2000 uS/cm range, that's + - 20 uS/cm)
ATC for specific conductivity only; however, also displays water temperature so you could calculate ambient conductivity