

# New Myron L Company Ultrameter II Features and Functions

## ***LANGELIER SATURATION INDEX/HARDNESS CALCULATOR***

Ultrameter II model 6Psi now features an LSI calculator that makes it easy to analyze the scaling nature of water in the lab or in the field. Using a calcium carbonate saturation index algorithm developed by Dr. Wilfred Langelier in 1936, the calculator computes the saturation index of a sample based on measured and inferred values for pH, temperature, hardness and alkalinity. You can then change any of these values in user adjust mode to analyze the effect of the change on water balance. User mode also allows you to input measured values for alkalinity and hardness as determined by other independent testing for a precise saturation index value.

Saturation index values are generally interpreted as follows:

- An index between -0.5 and +0.5 indicates balanced water
- An index of more than +0.5 indicates scale-forming water
- An index below -0.5 indicates corrosive water

## ***HARDNESS***

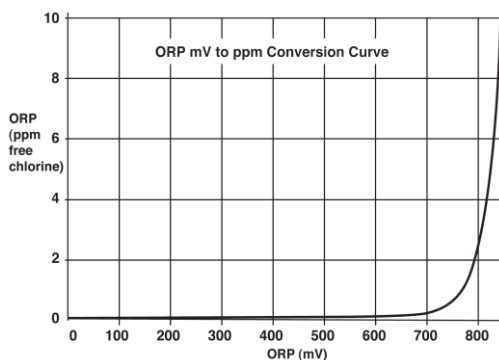
Within the LSI Calculator is a Hardness calculator that allows you to select either ppm or grains of hardness units for saturation index calculation. The hardness unit conversion is based on the following equivalency: 17.1 ppm (mg/L) = 1 grain. The hardness range is limited to 0.0 - 1710 ppm and 0.0 - 100 grains of hardness in the 6Psi.

## ***FREE CHLORINE***

Ultrameter II model 6Psi now features the ability to convert Oxidation Reduction Potential measurements from mV to parts per million free chlorine. mV and ppm free chlorine are the two most commonly used sanitizer measurement units in water quality management. The mV to ppm free chlorine conversion algorithm is based on a published conversion curve and bench testing performed at the Myron L Company. The accuracy of low-range ppm free chlorine readings has been increased by extrapolating from the published data. With this new feature Myron L instruments can measure a dynamic range of sanitizer concentrations that is wider than the range of a colorimetric test kit.

Additional ORP Specifications	
Spec	Value
Ranges	± 999 mV 0.00 – 9.99 ppm
Resolution	mV resolution: 1 mV ppm resolution: 0.01 ppm
Accuracy	± 1 mV ± 2.5% of reading ppm*

Plot Showing the Conversion Curve between ppm and mV\*



\*Given water is sanitized by only chlorine at a pH of 6.5-7.5 and a temperature of 25°C

## ***WIRELESS DATA TRANSFER***

Ultrameter II models 6Psi and 4P now feature the ability to transfer data wirelessly with the bluDock™ accessory package. The bluDock works with any personal computer configured to recognize Bluetooth®† devices. Package includes UMII bluDock configuration, U2CI application software and operating instructions. U2CI has an intuitive user interface that makes it easy to transfer and manipulate data. Save files in native .mlc format to view in U2CI application or as comma separated values for spreadsheet import.

† Bluetooth is a registered trademark of Bluetooth SIG.