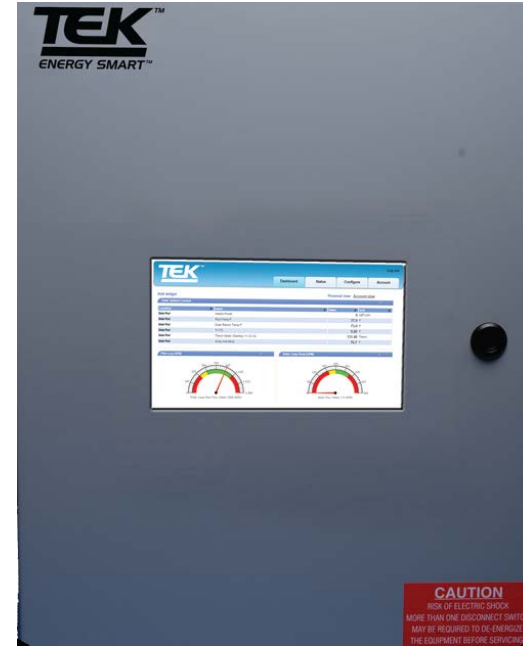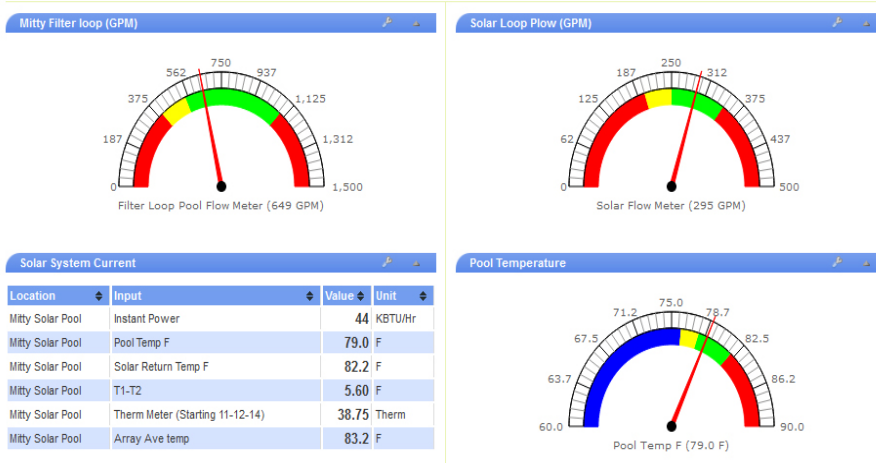# TEK™

ENERGY SMART™
CONTROLLER

Systems approach *to* Aquatics Center Energy Efficiency

Energy Smart Controller

What is it?

Centralized hub, connecting VFDs, Flowmeters, temperature sensors and pool water chemistry and other sensors in the mechanical room to a unified web interface for monitoring and control.

Who buys a TEK Monitor/Controller and key items to look for.

- *Has a VFD, but it's in bypass during site visit.*
- *Worries about water consumption/leaks*
- *Requirement to monitor/allocate heating costs*
- *Managing multiple sites (School District, City, etc.)*
- *Managing poorly trained/marginal pool techs*
- *Dual heaters*
- *More than one pool at the site*
- *Remote location*

LINCOLN®
AQUATICS

VISUALIZE
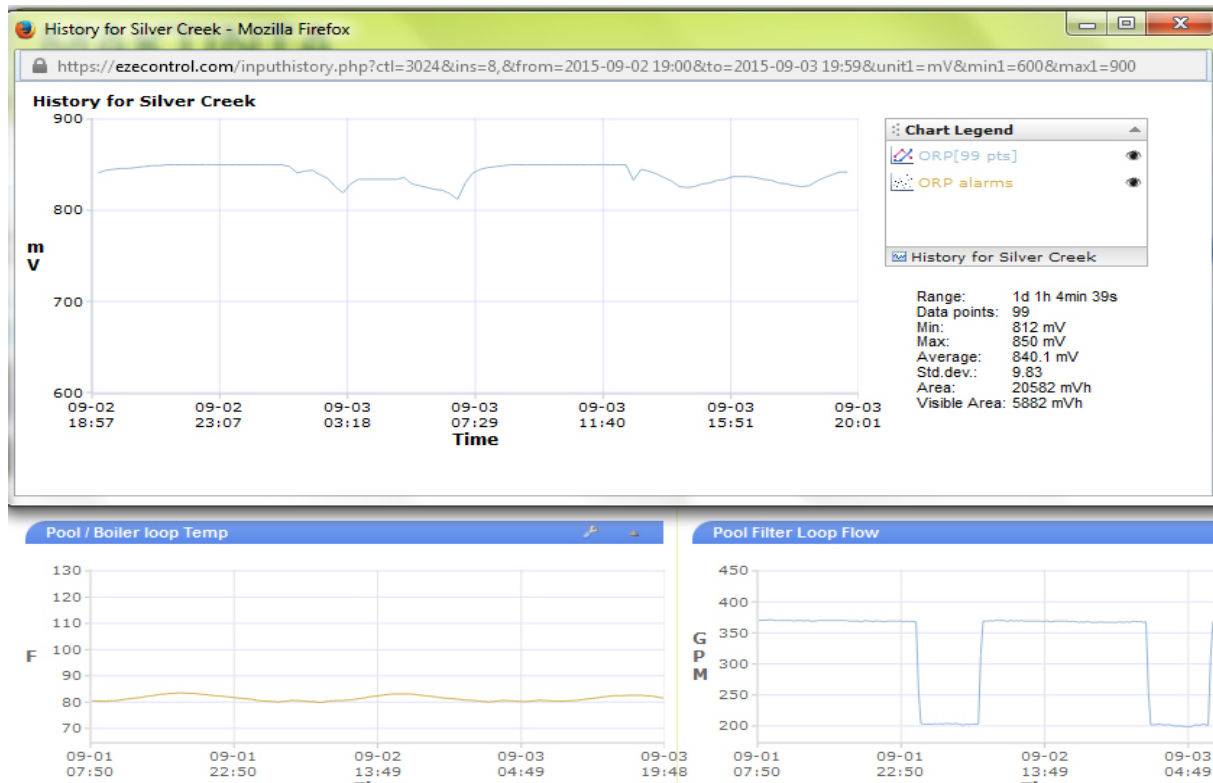SOLAR

Energy Smart Controller
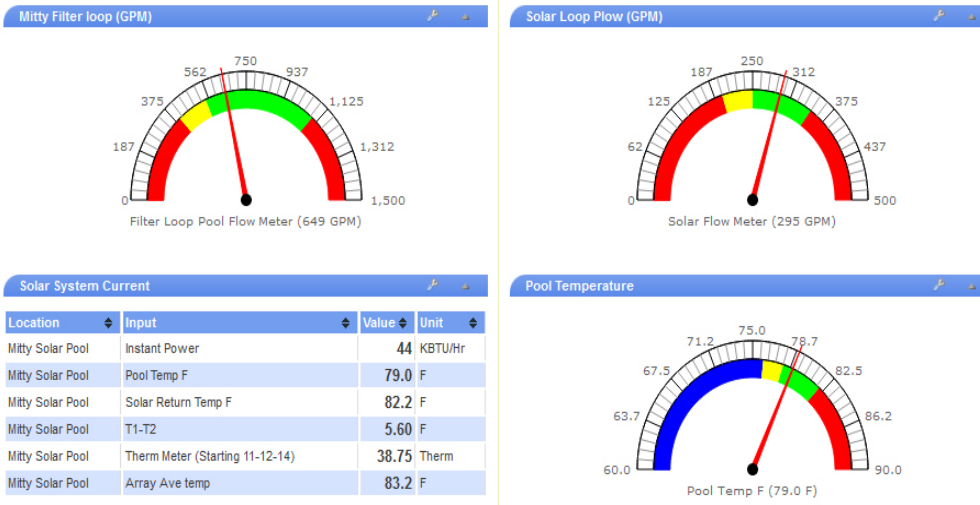

Direct Quantifiable Benefits

- **Remote filter pump scheduling including selectable, pre-programmed seasonal schedules**

- **Typically doubles VFD energy savings $'s**

- **Monitors pool parameters, sends text messages if pool chemistry, temp or water use out of range**

- **Control complex systems with dual heaters and/or solar, co-gen, etc.**

- **Remote access for service/support**

Intangible Benefits

- **Create Virtual logs of pool PH, ORP, Temp**

- **Monitor water use.**

- **Track energy consumption**

- **Check pool in real time using any web enabled device**

- **Confirm pump schedules, monitor thermal pool cover use.**

Energy Smart Controller

Customizable Monitoring/Control

- **Turn on/off pumps and trigger speeds (GPM)**
- **Monitor/Log pool parameters including: Temps, chemistry, energy use, solar production**
- **Create and update site specific, seasonal schedules**
- **Open/close valves, enable heaters, power sensors**
- **Graph any logged parameter for last hour, last 24hours, week, month, etc.**
- **Remote access for service/support**

Typical pool energy use and retrofit saving opportunities

$42,048

$33,507w/VFD

$23,177
VFD&contoller

Series1

Pumping
Costs

Baseline

Pool Gas Usage (therms)

Xtherm

Hiatus

Series1

Solar Heating

LINCOLN
AQUATICS

VISUALIZE
SOLAR