



LOCATION

Oncenter War Memorial Arena, Syracuse NY

OWNER

Onondaga County Facilities Group
Managed by SMG

SPECIFIER

TDK Engineering, Syracuse NY

PROJECT SPACE

34,500 ft²

COMPLETION DATE

October 2012

CONTROL STRATEGIES

- Dynamic Scheduling
- Task Tuning
- Demand Response
- Present Control

SYSTEM FEATURES

- (155) 0-10vDC Dimmable LED Fixtures
- Per Fixture Wireless Controllers
- Individual & Group Fixture Control
- Scheduled & Manual Presets
- PC, Tablet, & Smartphone Control
- Secure, Remote Access
- Energy Monitoring Kiosk
- Reporting & Alerting
- All fixtures ON or OFF within 2 seconds
- No annual fees

“We are extremely excited to have the ability to improve the game experience for fans using this new LED lighting system while saving energy, reducing operational costs, and keeping with our commitment to be a ‘greener’ facility.”

Jim Sarosy,
Syracuse Crunch COO

The Challenge

The Oncenter planned to upgrade the lighting on the arena floor from (167) 1000w metal halide fixtures to lower wattage, high efficiency LED lighting. The existing controls were designed for the existing fixtures and their long re-strike times – resulting in circuiting that was designed for capacity, not control. The facility typically ran “all on” or “all off”.

LED lighting is dimmable, and it doesn’t have the long warm-up times associated with metal halide. While hockey games and sporting events are an important part of the War Memorial Arena’s programming, the actual games make up a relatively



small number of the hours the facility is lit. The Oncenter saw an opportunity to eliminate "over-illumination" during non-event hours and reduce energy waste.

As a part of their Green Upgrade, the Oncenter wanted the new lighting system to support "tuning" for specific tasks (set-up, clean-up, practice, game, etc.) using individual fixture control. The new control solution could not require rewiring to break up the existing circuits or installing control wires to connect every light. Installing new control or power wiring in the facility was cost prohibitive due to lack of access at the ceiling.

The best solution was wireless, and that's where Autani's EnergyCenter comes in.

The Solution

WIRELESSLY NETWORKED FIXTURES

Autani Wireless Fixture Controllers were integrated into each of the LED lights by the fixture manufacturer, eliminating the need to install controllers in the field. Existing metal halide fixtures were replaced one-for-one with wirelessly controlled LED lighting. Because each fixture is independently, wirelessly addressable, no additional electrical work was required.



High ceilings and lack of access made re-circuiting or running control wiring impractical.

Once installation was complete, lighting fixtures and the Autani Manager were powered up. Autani Lighting Controllers were added to the wireless network using the "Easy Setup" wizard in the EnergyCenter software on the Autani Manager.

TASK TUNING

Presets tune lighting for specific applications including: game, practice, event setup, special event, blackout, and introductions. Practices and special events do not need as much light as a televised hockey game; set-up and tear down do not need as much light as an event. Appropriate presets were recorded for common uses of the facility. Groups of lights were set so that facility staff can easily customize lighting "on the fly" for non-standard events.

MANUAL CONTROLS

Local switches backstage and at gallery level provide simple "On" and "Off" control for work-lighting presets. Two WiFi enabled tablets (Apple iPads) provide preset control for the Oncenter Staff: sixteen customizable buttons accessed by the tablet's web browser.

AUTOMATED CONTROLS

Special event, practice, and game lighting are set in advance using the intuitive scheduling features in Autani's EnergyCenter Software. Sweeps ensure that the lights are off when the Arena is empty.



Event staff at the War Memorial use an iPad with 16 present buttons for direct control.

The Results

AUTOMATING GREEN

Autani's EnergyCenter automates the War Memorial, tuning the lighting to an



appropriate level for what is going on in the facility. Over-illumination is reduced by turning on only the lights that are needed, when they are needed, and only at the level required by the current task.

DRAMATIC CONTROL

Because EnergyCenter provides immediate response, event staff can now create dramatic lighting changes – turning off some or all of the general lighting at key moments to allow special effects lighting to shine through – and then quickly restore light.

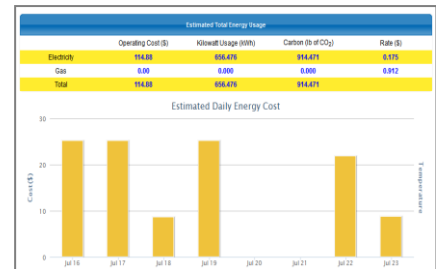
SAVINGS YOU CAN SEE!

Turning off lights you don't need makes a difference, even if those lights are very efficient LEDs. During non- event hours, EnergyCenter has reduced energy consumption by lighting at the War Memorial up to 65%.

Facility staff can monitor savings locally via their desktop PC, or remotely using Autani's Access Manager remote access portal and any device with a web browser. Using EnergyCenter's Kiosk feature, savings is demonstrated on a flat panel TV in the lobby.



EnergyCenter includes a “Kiosk” mode that displays energy savings on any connected device with a web browser, including web-enabled TVs.



EnergyCenter shows savings as it happens with intuitive graphs and reporting features.