



**MARKET:** Education  
**SOLUTION:** Lighting Retrofit

## CASE STUDY:

### Servidyne Assists University in Enhancing Energy Efficiency and Lowering Environmental Impact through Lighting Retrofit

#### The Challenge:

This University is a 500,000 square foot private campus situated along the coast in California. The university established a strong environmental stance, in part due to its location on the ecologically sensitive Pacific Coast, maintaining a rigorous recycling program earning recognition from the California Waste Reduction Awards Program (WRAP). The campus, built in the 1960's, contained a mixture of lighting systems. The age of the buildings was cause for challenges. The campus library had low ceilings and still used 1960's era light fixtures. The campus gymnasium also was an area of special concern with its current low light output.

#### More about the University

- 500,000 square foot private university
- 90 acre oceanfront campus
- Nearly 3,000 students
- Located near the Pacific Coast in California
- Earned recognition from the California Waste Reduction Awards Program (WRAP)
- 44 day retrofitting project
- Nearly 1,400 fixtures in 14 campus buildings
- \$50,000 in annual energy savings
- Custom replacement fixtures required



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To *enhance efficiency* and *lessen the environmental impact* of the campus, the University contracted with an Energy Services Company (ESCO) to implement a campus-wide energy savings program through HVAC and lighting systems retrofits. Servidyne, in partnership with the ESCO, received the lighting portion of the contract after demonstrating a thorough understanding of the University's expectations and standards. Because of the age and mixture of lighting systems, Servidyne had to engineer a customized lighting system producing maximum energy savings for the University.

### The Solution:

The solution described by Servidyne entailed a 44 day project retrofitting almost 1,400 fixtures in 14 campus buildings, producing nearly \$50,000 in annual energy savings leading to a simple payback of just over 2.5 years. However, the design and installation was by no means simple or straightforward.

The campus library required Servidyne to engineer custom replacement fixtures. The end product was 8-foot 2-lamp T8 fixtures running on efficient ballasts, fitted with custom designed lenses less than three inches deep. These fixtures dramatically improved light levels and color rendering in the library while providing extra clearance. The campus gymnasium also required some unique ideas, and Servidyne responded with custom pendant mounting of new energy efficient fixtures, engineered to provide a perfect fit to the convex contour of the gymnasium ceiling. The primary solution used elsewhere was campus-wide retrofits of linear fluorescent fixtures with high performance electronic ballasts for maximum efficiency, as well as new generation lamps, which produced greater energy savings than conventional fluorescent fixtures.

In keeping with the University's commitment to the environment, all lamps, ballasts, wiring and fixture bodies removed during the retrofit were recycled in an ecologically sound manner.

### About Servidyne:

Established in 1925 and operating nationwide and internationally, Servidyne provides comprehensive energy efficiency solutions, sustainability programs, and other building performance enhancing products and services to building owners and operators, and engages in commercial real estate investment and development. The Company's building performance products and services enable customers to optimize the short-term and long-term financial performance of their building portfolios, while reducing their carbon footprints and improving the comfort and satisfaction of their buildings' occupants. These offerings include comprehensive sustainability programs, energy engineering and energy management analytical consulting services, turnkey implementation of energy savings and other infrastructure upgrade and retrofit projects, and proprietary Web/wireless preventive maintenance and service request systems with integrated utility and maintenance reporting. The Company also owns or controls shopping centers in the Midwest and Southeast and office properties in metropolitan Atlanta, Georgia. For more information about Servidyne, please visit [www.servidyne.com](http://www.servidyne.com) or call 770-933-4200.

