



Mount St. Mary's University

INTRODUCTION

Mount St. Mary's University, located in Emmitsburg, Maryland, was established in 1808 and achieved university status in 2004.

The university is located on a 1,400 acre campus with over 1 million square feet under roof, and numerous buildings for teaching, living, and sports. The university has grown to have over 2,400 students, with more than 1,000 staff in 2019.

THE CHALLENGE

Mount St. Mary's is a not for profit organisation, so making the best use of funds, and using resources as efficiently as possible is vital to achieve its objectives. The university places emphasis on being an active part of the local community, and, as such, takes sustainability and its impact on the environment very seriously.

The university wanted to achieve savings in energy costs and carbon emissions, and identified voltage optimisation technology as an option to do this.

Powerstar's analysis revealed that the range of equipment and activities on site alongside the long operational hours, would benefit from voltage optimisation technology.

THE SOLUTION

After a thorough site evaluation and inspection of the campus's voltage profile, Powerstar found that the university had a high but stable incoming voltage.

Powerstar recommended the installation of Powerstar LITE systems, a fixed low voltage optimisation solution that reduces the incoming voltage by a set, pre-defined amount.

Powerstar provided the energy saving technology as a fully bespoke, concept to completion, turnkey solution defined entirely by the requirements of the university.

SAVINGS AND BENEFITS

Post-installation, measurement and verification confirmed that the Powerstar LITE system is reducing the voltage supplied to the Seminary Building by 15V, providing an annual electrical consumption saving of 18.7%. This is providing significant cost savings to the university and minimising the carbon emissions resulting from their energy use.

Following the success of the installation, Mount St. Mary's University installed two additional Powerstar LITE systems with similar savings being achieved, and are in the process of ordering a Powerstar MAX electronic-dynamic voltage optimisation system.

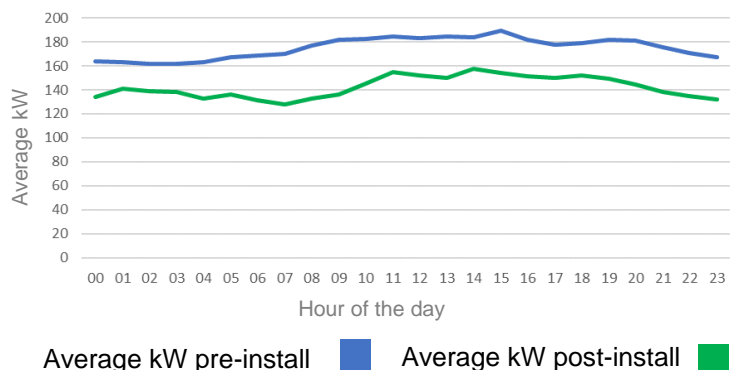
KEY FIGURES

- **Average Annual Consumption Saving: 18.7%**
- **Voltage Reduction: 15V**



Mount St. Mary's University is highly ranked in the state of Maryland

The graph below shows the average consumption by hourly periods pre and post Powerstar install.



LITE MAX HV MAX