

## CASE STUDY OF ENERGY SAVINGS IN SUISSE MAJESTIC HOTEL SWITZERLAND

### ABSTRACT

This case study explores the installation of LEC Lighting energy controllers in a four star hotel in Europe where traditional lighting fixtures added to the ambiance of the hotel, but were costing a fortune in lighting bills.

### CLIENT PROFILE



Built in 1870, the Grand Hotel Suisse Majestic is one of the jewels of the Belle-Époque on the Vaudois Riviera. As a meeting place for artists and celebrities, its comfort is on a par with its decor and location, in the heart of Montreux, facing Lake Geneva and the Alps.

### BUSINESS NEED

Each year, the lighting costs for this Belle-Époque style luxury hotel are in the region of 87,200 Swiss francs. It was important for the hotel to preserve the original lighting fixtures of the hotel which set an ambiance of tradition and quality. It was also important for the hotel to find a solution for reducing the energy consumption from the lighting without changing the lighting fixtures.

### SOLUTION

The Lighting Energy Controller from PowerSines was the solution chosen for the hotel. The LEC A installs on the electric board circuit and requires no change to existing infrastructure or lighting fixtures. The LEC A provides the right voltage to the lighting circuits, reducing electrical consumption bill, while maintaining the standard lighting necessary for the location.

### RESULTS

Thanks to the LEC, the average energy saving achieved on all the existing lamps amounts to 20.50%. Stabilizing the voltage also reduces the likelihood of the bulbs overheating: their service life is doubled and the air-conditioning expenses are reduced. In just over a year, the investment of 40,496 Swiss Francs will be amortized, since the hotel's electricity bill will be reduced by 35,248 Swiss Francs without any light fittings needing to be changed.

Annual electricity consumption for lighting	CHF 87 219
Total annual savings	CHF 35 248
on electricity – 20%	CHF 17 880
Indirect Savings (lamp replacement and cooling)	CHF 17 368
Capital expenditure excluding VAT	CHF 40 496
Return on investment	Year 1.15