Case Study: 8% Side by Side Improvement

Kafar Saba, Israel

Location:	Kafar Saba, Israel
System Size:	24kW
Modules:	(84) Suntech 270-watt
Inverter:	(2) SMA 10kW
Owner:	Eli Z.

Summary

This installation provided an ideal case for a side-by-side test to demonstrate the benefits of using Tigo Energy. The system included two arrays with identical modules and inverters, installed in the same orientation on the same flat commercial roof. Neither array was shaded. The side by side comparison with and without Tigo Energy optimizers shows significant improvement in energy production and ROI.

The Challenge

The system owner wanted to make sure he was getting the most energy possible out of his solar plant, but he noticed that one array was consistently underperforming its neighbor. Both used Suntech 270-watt modules (three strings of 14), both were connected to an SMA 10kW inverter, both were oriented due south on the same roof. Yet one array was consistently performing 5% below the other one.

The Solution

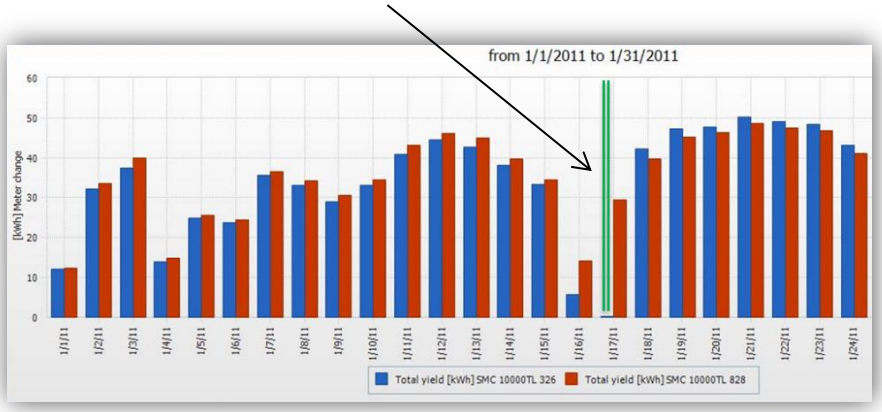
Tigo Energy optimizers were installed on the weaker array in the hopes of evening its performance with the stronger one.

The Results—8% performance increase

After retrofitting array "A" with Tigo Energy optimizers, its performance increased by 8% and increased ROI by approximately 30%. Not only did the array catch up with "B", it actually performed a full 2% better than array B.

After five months Mr. Z. decided he wanted to benefit from the improvement of Tigo Energy optimizers on his full array. Once it was optimized by Tigo, Array B was once again able to outperform array A giving the system owner an overall performance increase of 12%.

Tigo Energy Installed on Blue Array



Customer Testimony

"I was hoping the array would perform better, but I never expected it to perform that well."

Mr. Eli Z.