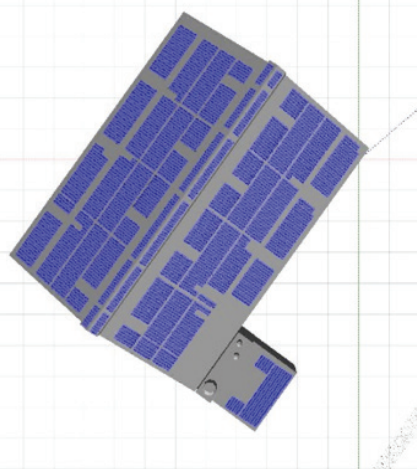


# Chin Hsing Rooftop PV Installation Achieves Higher Lifetime Value with SolarEdge

In preparation for installing a PV system on the Chin Hsing Precision Industry Co. factory and warehouse in Taiwan, a simulation was done to compare the impact on performance of installing inverters from a popular string inverter supplier to installing a SolarEdge DC optimized inverter solution. The simulation compared installing 21x30kW traditional string inverters vs. 23x27.6kW SolarEdge inverters. Taking into consideration BoS, inverter replacement and O&M costs and energy production over system lifetime, the simulation shows that over a 20 year system lifetime, the SolarEdge solution offers an advantage of 11.3 c/w (U.S.\$).



Chin Hsing decided to install a solar PV system on their 7016 m<sup>2</sup> factory rooftop to generate revenue and reduce electricity costs. Chin Hsing chose SolarEdge to maximize its energy production using module-level MPP tracking and monitoring. Flexible system design accommodating the roof's different tilts and facets and SolarEdge's built-in SafeDC™ safety feature, the most effective means Chin Hsing found to protect its assets, were also key factors.

"Chin Hsing Precision Industry Co., Ltd. is committed to providing the most sophisticated industrial components and integrating advanced smart technology equipment into Industry 4.0. By deploying SolarEdge with its intelligent solar monitoring system, the company can effectively monitor power plant operation and optimize energy generation to eventually establish a green supply chain as the first step toward green industry," comments *Ben Jian, General Manager, Billion Watts Technologies.*

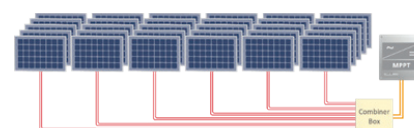
## 62% BoS Cost Savings

Due to considerably longer strings, the SolarEdge solution enables significant saving of DC Balance of System components and labor.

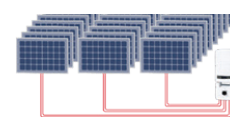
> Traditional Inverter: 123 strings of 21 panels

> SolarEdge Inverter: 69 strings of 38 panels

	Traditional String Inverter	SolarEdge
Solar CU PV cable 1x6sqmm [m]	11,114	4,489
DC MC4 connectors (kit)	246	138
Data logger	1	0
Cost	100%	38%
<b>Savings of 0.7 c/w</b>		



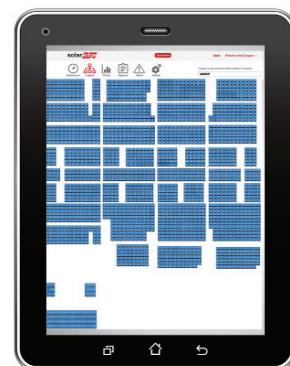
Traditional string inverter system layout



SolarEdge system layout

## Improved Asset Management and Reduced Lifetime O&M Cost

The SolarEdge cloud-based monitoring platform provides full visibility into system performance. Monitoring at the module-level is free for lifetime. Automatic alerts, remote troubleshooting and fault detection shown on the virtual site map can reduce length and frequency of on-site O&M visits. No added hardware, no service fees.



Chin Hsing physical layout in SolarEdge monitoring platform

## Longer Warranties

- > Longer product warranties
- > Low cost inverter replacement / warranty extension

## Increased Lifetime Revenues

SolarEdge enables maximum yield from the PV system, as Maximum Power Point Tracking is done for every two panels, eliminating power losses related to shading and mismatch. Using PVsyst to simulate the Chin Hsing installation, estimated system yields are as follows:

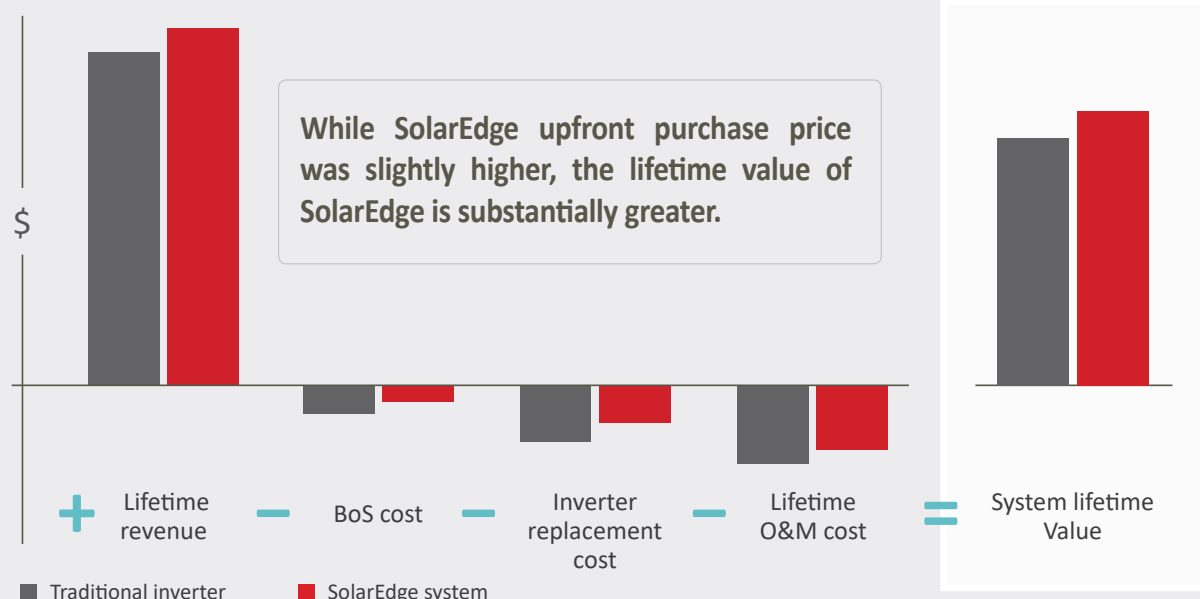
Yield (kWh/year)	Traditional string inverter	SolarEdge solution	SolarEdge advantage
PVsyst year 1 yield	882,366	899,685	2.0%
PVsyst year 20 yield	790,170	830,369	5.1%

**Advantage of 11.3 c/w over twenty years\***

\*Assuming linear degradation and aging mismatch growth, an electricity rate of \$0.16/kWh and an interest rate of 2%.



## Higher PV System Lifetime Value



This document includes estimates of various parameters of the compared solar systems, including annual A/C energy production, performance ratio and shading loss based on PVsyst computer-simulated results for installations using our and competing systems. While we are not aware of any reason to believe these estimates and comparisons are materially inaccurate or misleading, they are inherently uncertain and the projected results are not guaranteed. Actual results will vary depending on a number of factors, including actual field conditions, quality of installment and other variances from the assumptions underlying the estimates. Although care has been taken to ensure the accuracy, completeness and reliability of the estimates and comparisons presented, SolarEdge assumes no responsibility for these. MORE SPECIFICALLY, IN NO EVENT SHALL SOLAREEDGE BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR INCIDENTAL LOSSES OR DAMAGES RESULTING FROM OR ARISING OUT OF USE OF OR RELIANCE ON THE ESTIMATES AND COMPARISONS PRESENTED. MKTSEVSDLT30TWN March 2018