

Case Study: Solar Powered Solar Manufacturing



Sunerg Smart Modules Power New Factory

Location:	Citta di Castello, Italy
System Size:	137.8kW
Modules:	Sunerg 240W Smart Modules
Inverter:	PowerOne
Installer:	Sunerg



Architectural design for the Sunerg facility incorporated organic curves difficult for traditional solar modules.

Summary

Sunerg is an Italian manufacturer of solar modules based in Citta di Castello, Italy. When building their new manufacturing plant they chose to integrate their smart module product optimized by Tigo into the architectural design. This presents a number of challenges for traditional solar modules, but not for smart modules optimized by Tigo Energy.

Customer Experience

“Due to the special shape of the façade of our building, we installed panels with different inclinations, and we had to use panels of different outputs and size in order to keep the aesthetic shape of the façade and roof. The Sunerg Smart Modules which integrates Tigo Energy’s technology made this possible.

With traditional solar modules it would have been impossible to realize such a plant and still get a high ROI, The Sunerg Intelligent modules made the design and installation much easier and cheaper, we saved a lot of BOS cost and energy losses due to long DC cables.

The added value of the monitoring at panel level and our ability to use it to check voltage and current has been very useful during installation and commissioning. In such a plant it would have been very expensive and difficult to fix installation mistakes after installation.

The smart modules add to the plan a number of features which are extremely interesting and useful, which traditional modules do not offer: monitoring at panel level, panel-level disconnect for emergency and protection, optimization, and a much greater degree of design flexibility.”

- Luciano Lauri, CEO Sunerg



Panel-level monitoring helped in the commissioning process, which is extremely important when modules are difficult to access, such as in vertical façades.



Tigo’s panel-level MPPT corrects for mismatch caused by the curved façade and shade cast by nearby light poles.