



## DATA SHEET

# Samili

The Triangular Solar Column is a customizable aluminium solar mast characterized by vertically integrated photovoltaic cells mounted on all three faces of the triangular profile. It comes in 4-12 meter height, and has a simple, yet elegant design that Scandinavian lighting design is known for.

The Triangular Solar Column comes with tailored Smart City solutions, and is an ideal solar provider for larger street, road and highway projects as well as pedestrian areas.

## FEATURES

- Customizable aluminum solar mast
- Range 4 - 12 m height
- Extruded aluminum profile
- Operating temperature  $-25^{\circ}\text{C}$ ...  $+65^{\circ}\text{C}$
- The column can host sensors and a variety of Smart City add-ons
- Standalone, Grid Connected and Hybrid
- Poly/mono crystalline solutions

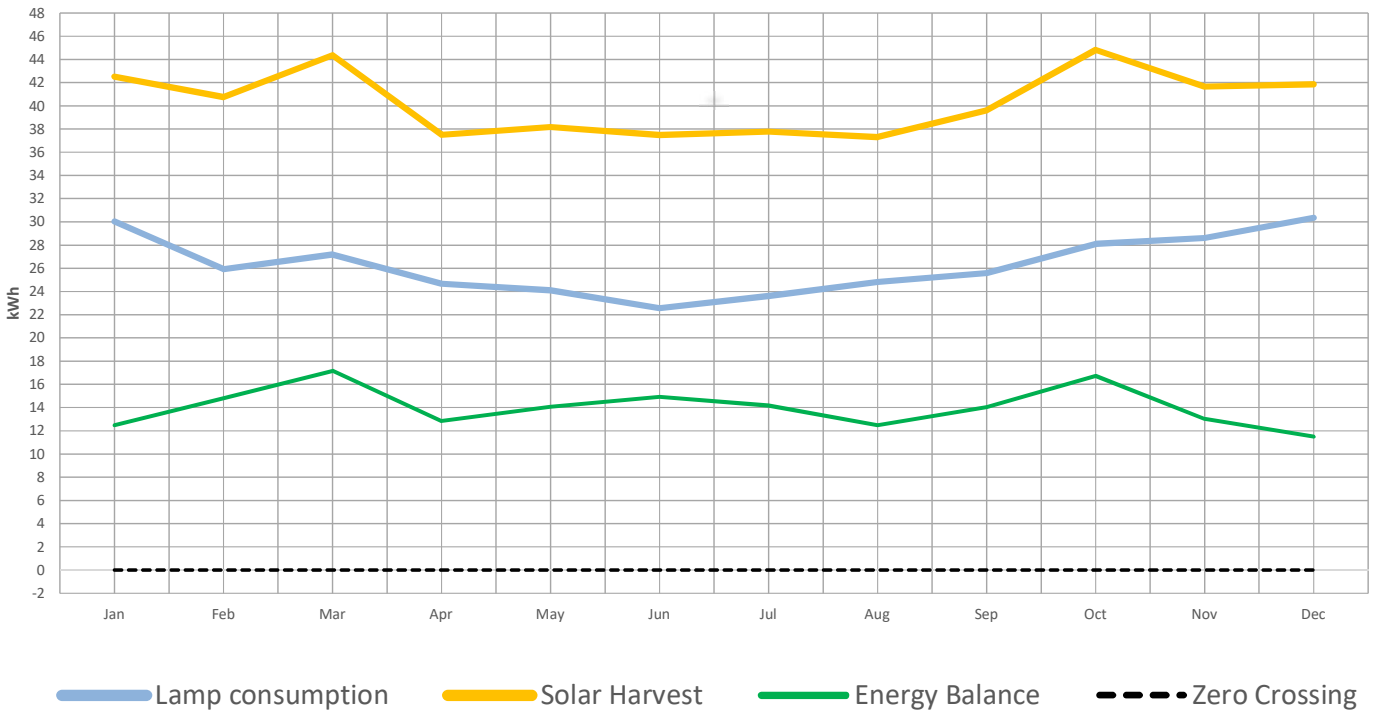


DIMENSIONS	MATERIAL	PHOTO-VOLTAIC ELEMENTS
Height 4-12m	Extruded aluminum profile	Poly/mono crystalline solutions
Profile triangular side length 22cm	Natural Anodized 25my	Energy production Watt Peak (all sides) 207-1035Wp
PV modules length 2,45m	Aluminum EN AW6063-T6	Maximum voltage 16.4V
	Wind load up to 160km/h	Max charge current 28,5A
POWER MANAGEMENT	BATTERY TECHNOLOGY	OTHER FEATURES
<b>Operating modes:</b> » Standalone » Grid Connected » Hybrid	Prepared for external battery chamber with following BMS options: » AGM, Lead-Crystal » NimH » Li-ion  Contact sales team for available options and battery sizes	In-built passive ventilation solution
<b>Operating temperature:</b> -25C... + 65C		Mounting on 4x20mm bolts
<b>Control system:</b> Self-consumption less than 1W		
SMART CITY FUNCTIONALITY		

The column can host sensors and a variety of Smart City add-ons.

**ENERGY CALCULATOR - DUBAI**

Energy data for Samili 3 with 73W load

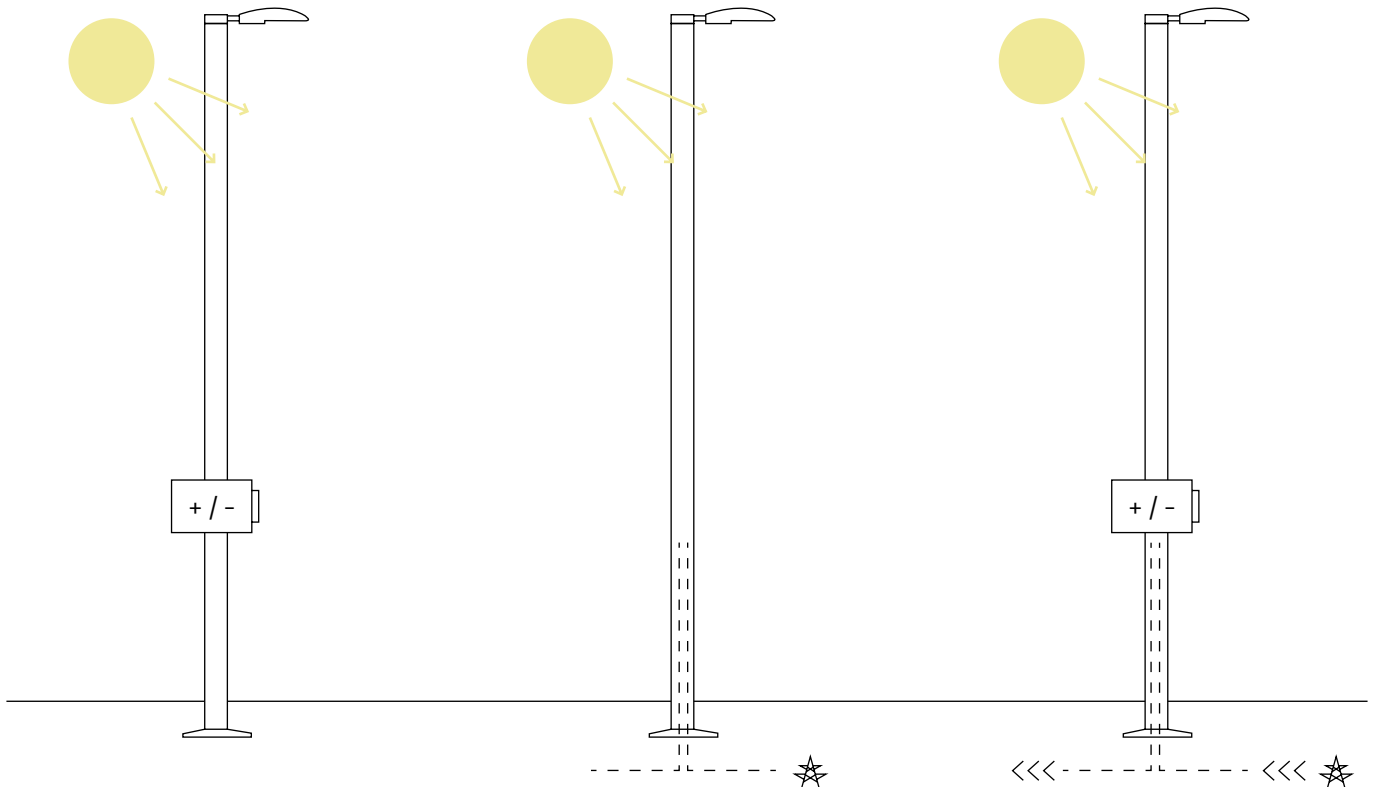


ENERGY SOLUTION

We offer three power configurations - Stand Alone, Grid Connected and Hybrid - which enable us to assist all our customers on a much broader range of street lighting projects.

Our market leading control system manages the energy harvest, energy storage and energy dispatch as well as other functionality on the mast. Power configurations are a prerequisite for any solar provider. Flexibility, customizability and dependability are key components of our energy solutions, when we assist customers on their street lighting projects.

By offering not only a Stand Alone solution, but also Hybrid and Grid Connected, we have the ability to add value to any project regardless the specifications. This makes us a key provider for the global lighting market, tailoring our solutions to the individual customer.



STAND ALONE

The stand alone system is based on the plug and play principle. The mast only needs to be installed on foundations on site and will be operating immediately.

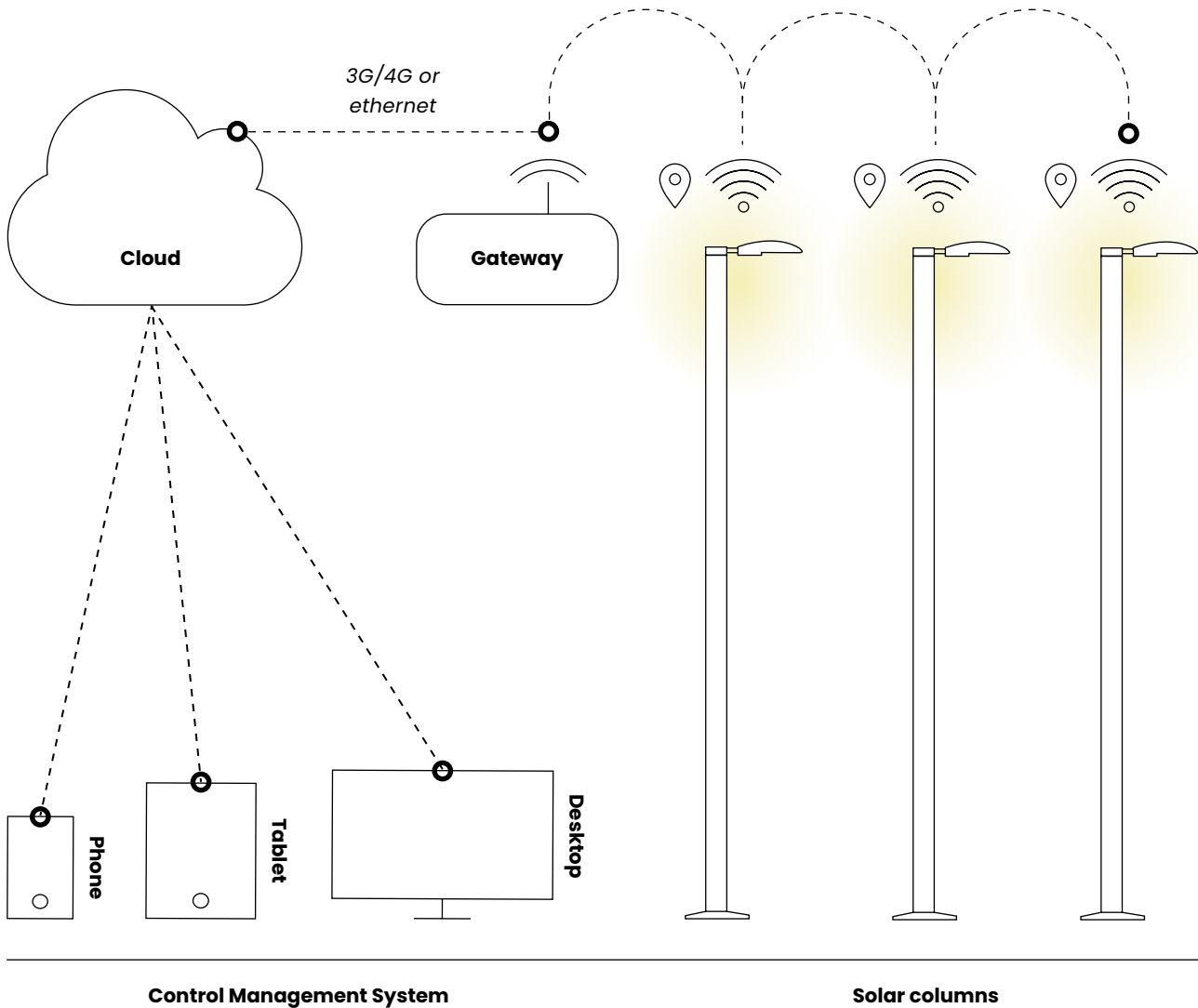
GRID CONNECTED

The energy harvested from the photo-voltaic modules is fed directly into the grid. During the night, energy is taken from the grid to power the light and any other electronic components on the mast. The basic theory behind Grid Connected is that the system can assist the grid during busy daytime periods and then buy back power at night when electricity may be cheaper.

HYBRID

The Hybrid system is connected to the grid, but also has integrated battery storage. This enables maximum efficiency of energy harvest and option for grid buffering. Distributed storage is often seen as an important element to the green energy transition and the Hybrid system provides the ideal infrastructure for this. The solution ensures 100% security for light in areas where unstable grid is part of the reality.

CLLOUD SOLUTION



**The solar columns are controlled by our Cloud Solution, which connects and manages all columns from one user driven platform.**

The key data on the street light performance is accessible through the cloud solution. The web platform's intuitive interface allows easy light management. The dashboard provides monitoring, configuration and asset management.

The platform has been developed with sophisticated monitoring and control capabilities, to ensure that all components of the mast system operate at maximum efficiency - together.

It provides data collect services, real time control services, scheduling services, configuration and commissioning services, automation, alarm- and reporting services.

The platform includes access by a mobile app and has open API capabilities. The solution is typically delivered as a cloud service, but can also be installed on a local server upon request.

# Empowering energy solutions for street lighting and infrastructure

Sunio is a prominent importer of renewable energy solutions and has a rich history of pioneering sustainable practices and contributing to the clean energy transition in the United Arab Emirates. Founded in 2023 we embarked on a mission to introduce cutting-edge renewable technologies to the UAE market, promoting environmental consciousness and energy independence.

We recognized the growing need for sustainable energy alternatives in the UAE, considering the region's abundant natural resources and the global shift towards clean energy.

We are dedicated to sourcing and importing the latest renewable energy solutions from around the world. Working closely with renowned manufacturers and industry experts, we have curated a diverse portfolio of high-quality products, including solar street light solutions, solar panels, energy storage systems, and other sustainable technologies.

Through strategic partnerships and collaborations, we play a pivotal role in introducing and popularizing renewable energy solutions across the UAE. We actively engage with government entities, private enterprises, and individuals, raising awareness about the benefits of clean energy and facilitating its adoption on a large scale.

Driven by a vision of sustainability and a passion for environmental stewardship, we have actively contributed to the UAE's ambitious clean energy targets. By importing and providing access to advanced renewable technologies, we have helped the UAE reduce its carbon footprint, diversify its energy mix, and foster a more sustainable and resilient economy.

As a trusted importer of renewable energy solutions, we continue to empower individuals, businesses, and organizations to embrace clean energy alternatives, reduce their environmental impact, and contribute to a greener future for the UAE.