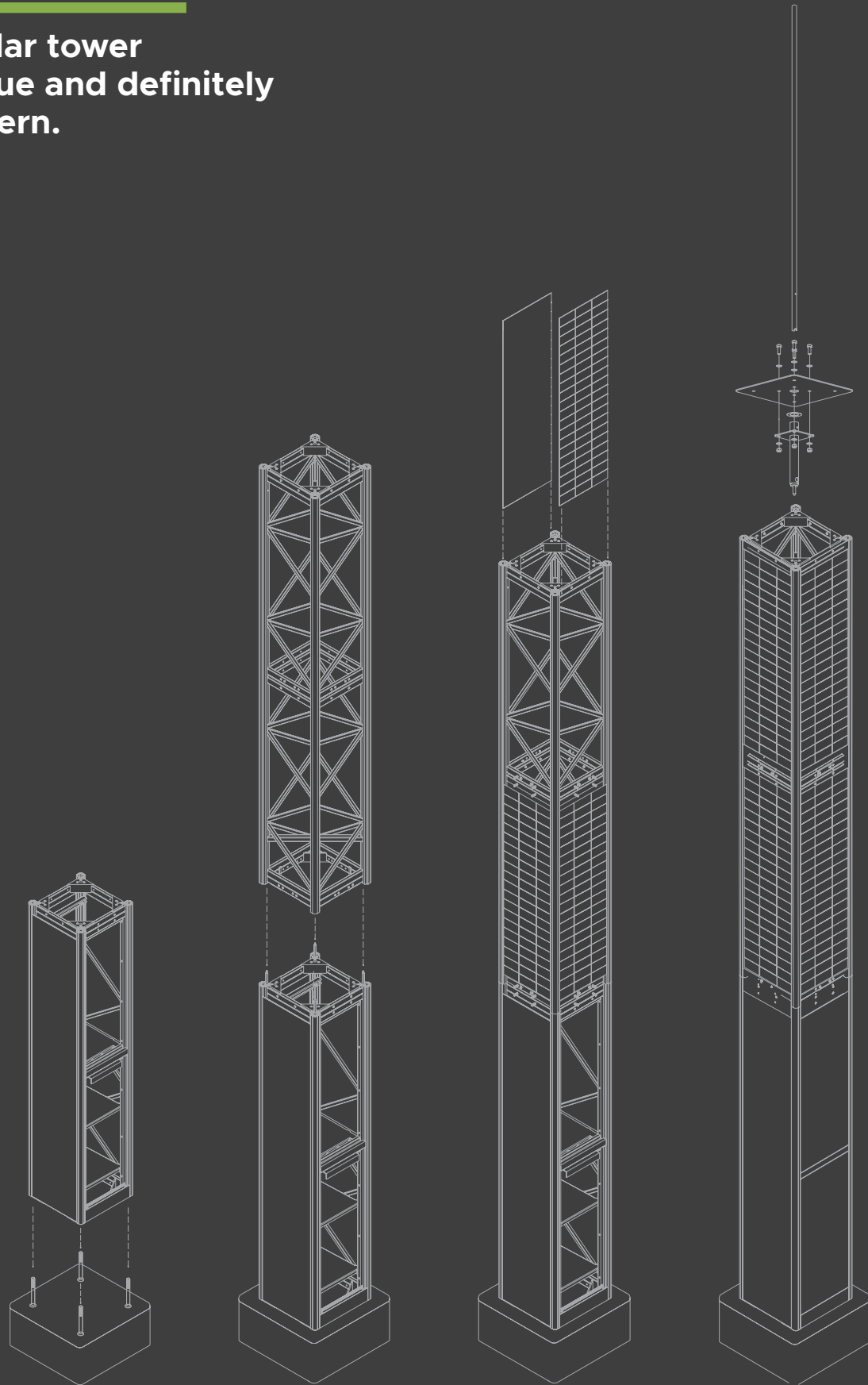


A solar tower  
unique and definitely  
modern.



02

Serie  
**MONOLITH**

MS1 | MS2 | MS3 | MS4



## The Monolith 2.1

**A fully autonomous solar tower with customized intelligent functions offering high energy production.**

The Monolith represents the new generation of multi-functional solar tower on the market. Designed to ensure uninterrupted operation of critical equipment, its innovative design allows it to maximize its performance, storage capacity and energy production. Its photovoltaic panels are equipped with the latest cell technology and its patented chassis provides the space required for battery storage.

Thus, the combination of its high energy storage capacity and its numerous solar panels gives it an exceptional autonomy, even when the weather conditions are unfavorable. The solar tower can also provide power for communication systems to extend data transmissions, provide wireless access to a multitude of network varieties, and raise the level of security, functionality, and self-sufficiency at all venues and events.



The MS3 on the alley of the Old Port of Montreal, Canada.

## Advantages

- Urban, modern and solid design that can be installed in any environment
- Unmatched energy efficiency on the market
- Energy accumulators and secure electronic components within the structure
- Significant reduction in operations, infrastructure and maintenance costs
- Strong resistance to wind and weather
- Real-time remote access to performance data
- Programmable email alarms
- Uninterrupted power to critical equipment

## The applications 2.2

**The Monolith is a solar tower that meets specific needs with solutions that are both viable and durable.**

Its numerous mounting plates and its six-foot mast allow it to attach many types of equipment from different technological spheres. Whether it's surveillance cameras, antennas, weather stations, lights or even emergency telephone devices, the Monolith is ready to receive them and ensure their continuous operation. In addition, its optional USB ports can easily charge electronic devices and its intelligent functions to notify the manager of any technical problems or unauthorized opening of the box.



The MS4 on the university campus in Fullerton California, USA.



### LIGHTING

Multiple anchor points for the installation of exterior lights such as street lights and directional lights with wide or narrow beam.



### ELECTRIFICATION

Power for external electrical devices such as water pumps, crossing gates and motorized fences.



### SECURITY

Enhanced civil security with emergency telephones, audio and broadcast warning systems and video monitoring and surveillance with fixed, motorized and thermal cameras.



### TELECOMMUNICATION

Deployment of WiFi, 3G, 4G or LTE networks and increasing the range of communications with point-to-point and mesh systems.



### MULTI-TECHNOLOGY

The power, reliability and autonomy of the Monolith series make it possible to combine all types of technologies in a single tower.

# AN INDEPENDENT ENERGY SOURCE

Solar energy reinvented

## Did you know?

With a power of up to 2480 W and an energy storage capacity of 9600 Wh, the Monolith allows the absorption of 490 kg of CO2 annually, which is the equivalent of 22.5 trees.

One tree absorbs up to 21.7 kg of CO2 per year.

## The characteristics

2.3

With its unique design, the Monolith blends into the urban and rural landscape.

Its entirely vertical design allows it to be a low-maintenance product since the elements, such as rain and wind, naturally clean the exterior of the building. In addition, from dawn to dusk, the positioning of the panels ensures efficient energy production.

### STRUCTURE

The Monolith is made of a robust aluminum alloy frame that is wind resistant. Its solar panels, composed of high-performance cells, are covered with a hardened and reinforced glass to ensure their durability for the most arduous climates, which ensures excellent efficiency.

### FINISH

Its standard natural aluminum finish allows it to resist corrosion. It can also be painted and/or treated for better resistance to salt air and high humidity. Several colors are available according to the customer's needs.

### STORAGE

Batteries, electrical and electronic components are housed in separate compartments. These compartments are weatherproof and prevent the intrusion of environmental contaminants.

### SECURITY

Accommodates multiple security systems simultaneously such as surveillance cameras, video management software, emergency telephones, public address systems and more.

### ANCHORING BASE

A standard concrete base with 1 inch bolts requiring no conduit, wiring, infrastructure or electricity.

### NETWORK

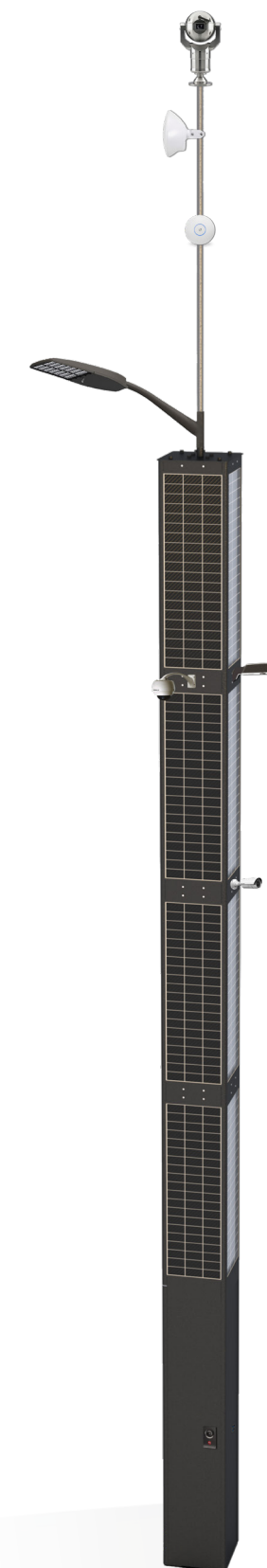
Mesh, Point to Point or Point to Multi-point, GSM 3G, 4G or LTE network and WIFI system.

### EXTENSION POLE

The design of the Monolith offers the possibility of installing a vertical pole on its roof to attach a panoramic camera and a telecommunication antenna up to 6 feet high.

### WARRANTY

Five-year limited warranty. Ten-year warranty on solar pane.



On the left, the MS4 on the edge of Highway 640 in Quebec, Canada. On the right, the MS4.

## Solar Impulse 2.4

The Monolith series is one of the 1000 solutions certified by the Solar Impulse Foundation. With its innovative and efficient technology, Soluxium Technologies meets the criteria of the most profitable, ecological and viable renewable energy on the market.

In its praise of new technologies that combine ecology and economy, Solar Impulse is intended as a promotional platform to highlight the best in sustainable development and cost-effective solutions. The objective is to demonstrate that the selected alternatives are judicious choices for the protection of the environment and advantageous for clean economic growth.



The MS4 at Central Park in New York, USA.

## The specifications 2.5

STRUCTURE	MS1	MS2	MS3	MS4
Width	22.875 in (581mm)			
Depth	22.875 in (581mm)			
Total height (without mast)	183.5 in (4.66m)	255 in (6.48m)	326.5 in (8.29m)	398 in (10.11m)
Dimension of the mast	1.9 in x 88 in (48mm x 2.235m)			
Visible part of the mast	1.9 in x 68.5 in (48mm x 1.74m)			
Weight (without battery)	555.96 lbs (252.18 kg)	711.68 lbs (322.81 kg)	867.4 lbs (393.45 kg)	1023.12 lbs (464.08 kg)
Tower material	6061-T6 aluminum alloy			
Mast material	Galvanized steel			
Bolt circle	21.627 in (549 mm)			

SOLAR	MS1	MS2	MS3	MS4
Number of panels	4	8	12	16
Total power	620 W	1240 W	1860 W	2480 W

BATTERIES	MS1	MS2	MS3	MS4
Chemistry	AGM			
Voltage	12 Vdc / 24 Vdc			
Capacity	800 Ah / 400 Ah			
Discharge capacity	50 %			
Lifetime - 30% DOD	3000 cycles			
Chemistry	LiFePO4			
Voltage	24 Vdc / 48 Vdc			
Capacity	400 Ah / 200 Ah			
Discharge capacity	90 %			
Lifetime - 90% DOD	6000 cycles			

WARRANTY	
AGM Batteries	1 year
LiFePO4 Batteries	5 years
Global limited	5 years
PV Panels	10 years (90%)

