



# Monolith Series

### Fully autonomous solar tower with customised intelligent functions for high energy production.

The Monolith represents the new generation of multifunctional solar towers on the market. Designed to ensure uninterrupted operation of critical equipment, its innovative design maximises efficiency, storage capacity and energy production. Its photovoltaic panels feature cells based on the latest technology and its chassis provides the space required for battery storage. The combination of its high energy storage capacity and large number of photovoltaic panels gives it exceptional autonomy, even in adverse weather conditions.

The Monolith can also supply power to communications systems to extend the range of data transmissions, provide wireless access to a wide variety of networks, and raise the level of security, functionality and self-sufficiency at all venues and events.

- Urban, modern and solid design that can be installed in any type of environment
- Unrivalled energy efficiency on the market
- accumulators secured within the structure

Solu Xim

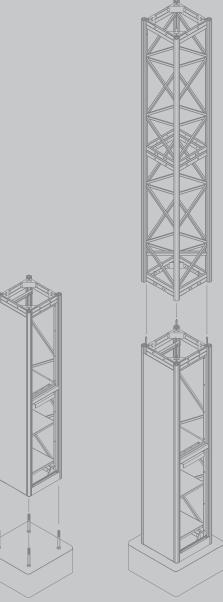
- Significant reduction in operations, infrastructure and maintenance costs
- Strong resistance to wind and weather
- Real-time remote access to performance data
- Programmable e-mail notifications
- Uninterrupted power to critical equipment

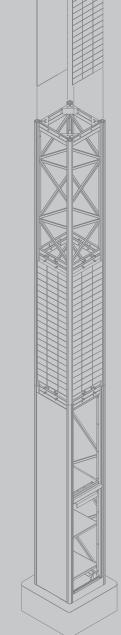


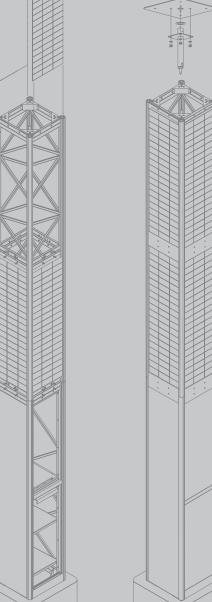
Monolith MS4 and Monolith MS2 in the industrial district of Mascouche.

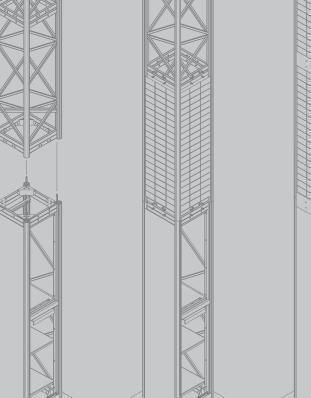


Sophisticated, unique and definitely modern solar tower









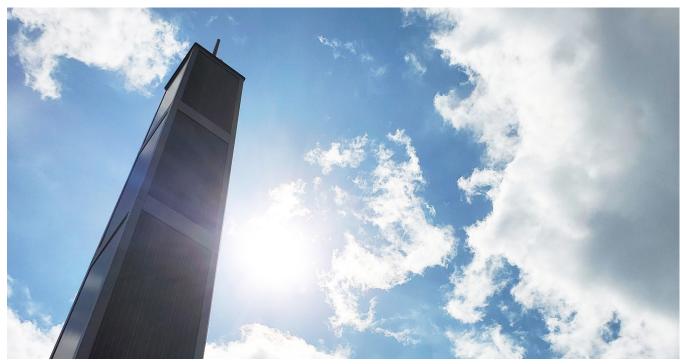




## Characteristics

#### With its unique design, the Monolith blends into both urban and rural landscapes.

Its entirely vertical design means that the product requires very little maintenance, since the elements, such as rain and wind, naturally take care of cleaning the exterior facades. From dawn to dusk, the positioning of the photovoltaic panels ensures highly efficient energy production.



The Monolith MS3 in the industrial district of Mascouche.

MONOLITH SERIES	DESCRIPTION
STRUCTURE	The Monolith has a robust, wind-resistant aluminium alloy chassis. Its photovoltaic panels, made up of high-performance cells, are coated with tempered glass to ensure their durability in the harshest of climates, providing excellent efficiency.
ANCHORING BASE	A concrete base with one-inch anchors requires no conduit, wiring or electrical infrastructure.
EXTENSION POLE	The Monolith's design allows you to install a vertical pole up to six feet high on the roof, for mounting cameras and telecommunications antennas such as Wi-Fi.
FINISH	Its standard natural aluminium finish makes it corrosion-resistant. It can also be painted and/or treated for greater resistance to salty air and high levels of humidity. Several colours are available to suit customer requirements.
STORAGE	Batteries and electrical and electronic components are housed in separate compartments.
NETWORK	Supports mesh, point-to-point or point-to-multipoint, GSM micro-network and Wi-Fi systems.
SECURITY	Accommodates multiple security systems simultaneously, such as cameras, emergency telephones, public address systems and more.
WARRANTY	5-year limited warranty. 10-year limited warranty on photovoltaic panels.

# **Applications**

# The Monolith is a photovoltaic tower that meets specific needs with viable and sustainable solutions.

Its many mounting plates and six-foot mast mean it can be used to mount a wide range of equipment for a variety of technological applications. Whether it's surveillance cameras, antennas, weather stations, lighting or even emergency telephone devices, the Monolith is ready to receive them and keep them running smoothly. What's more, its optional USB ports can easily recharge electronic devices, while its intelligent functions ensure that the manager is notified of any technical problems or unauthorised opening of the box.



Monolith MS4 and Monolith MS2 in the industrial district of Mascouche

A footprint as small as than 0.34 m<sup>2</sup>



#### **LIGHTING**

Several anchor points for installing wide-beam or narrow-beam outdoor street and directional luminaires.



#### **ELECTRIFICATION**

Power supply for external electrical equipment such as railroad crossing gates, water pumps and motorised fences.



#### **SECURITY**

Improved civil security with emergency telephones and systems for broadcasting audio and televised warnings, as well as surveillance and video monitoring with fixed, motorised and thermal cameras.



#### **TELECOMMUNICATION**

Deploy Wi-Fi and GSM networks and extend the communication range of point-to-point and mesh systems.



#### **MULTI-TECHNOLOGY**

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

# Technical specifications

### **STRUCTURE**

A 6061-T6 aluminium alloy structure with a galvanised steel mast using  $0.34~\text{m}^2$ . The height can be adapted to the customer's needs thanks to the modular design of the design.

MONOLITH SERIES	MS1	MS2	MS3	MS4		
Width	<b>581mm</b> (22.875in)					
Depth	<b>581mm</b> (22.875in)					
Total height (without mast)	4.66 m (183.5 in)	6.48 m (255 in)	8.29 m (326.5 in)	10.11 m (398 in)		
Mast dimensions	48 mm x 2 235 mm (1.9 in x 88 in)					
Visible part of mast	48 mm x 1740 mm (1.9 in x 68.5 in)					
Weight (without battery)	555.96 lbs (252.18 kg)	<b>711.68 lbs</b> (322.81 kg)	867.4lbs (393.45kg)	1 023.12 lbs (464.08 kg)		
Bolt circle	<b>549</b> mm (21.627 po)					

### **SOLAR**

An innovative vertical photovoltaic concept providing power of up to 2 480 W.

MONOLITH SERIES	MS1	MS2	MS3	MS4		
Number of panels	4	8	12	16		
Total power	620 W	1240W	1860 W	2 480 W		

### **BATTERIES**

MONOLITH SERIES	MS1	MS2	MS3	MS4	MS1	MS2	MS3	MS4
Chemistry	AGM				LiFePO4			
Voltage	12 Vdc / 24 Vdc				24 Vdc / 48 Vdc			
Capacity	800 Ah / 400 Ah				440 Ah / 220 Ah			
Maximum discharge capacity	50 %				90%			
Lifetime (30 % DOD)	3 000 cycles			-				
Lifetime (90% DOD)	-			6 000 cycles				

### **WARRANTIES**

- AGM batteries | 1-year warranty
- LiFePO4 batteries | 5-year warranty
- Global | 5-year limited warranty
- Photovoltaic panels | 10-year warranty (90%)

