



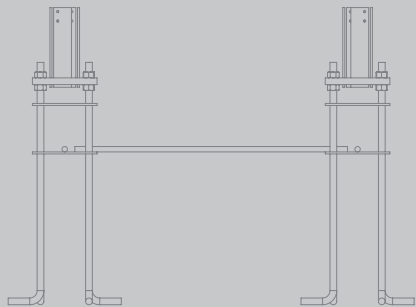
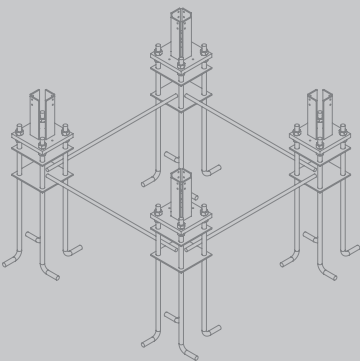
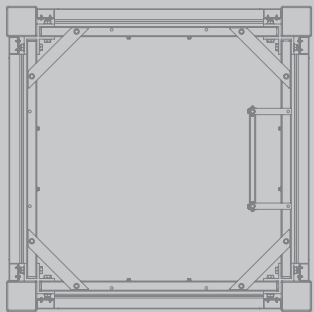
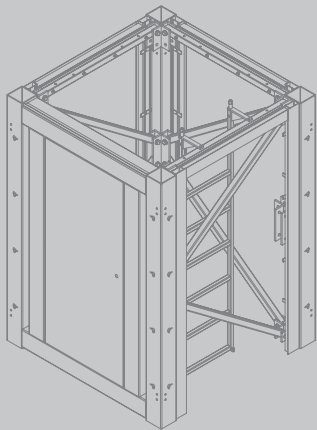
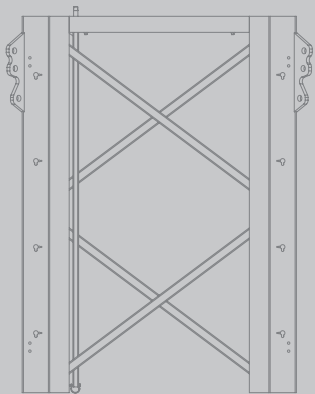
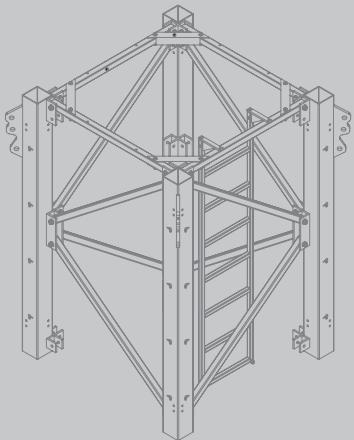
# BECAUSE THE FUTURE IS BRIGHT

Photovoltaic energy redefined • SPT Series



# SMART POWER TOWER

Photovoltaic tower with unrivalled energy efficiency



# SPT Series

A fully autonomous solar tower designed to offer a wide range of applications.

The Smart Power Tower has been designed and developed to be a power source of unrivalled performance, specifically for regions where infrastructure is limited, remote or non-existent.

Its vertical design provides a small footprint, high reliability and minimal maintenance. The tower's remote monitoring system also enables maintenance to be reduced and coordinated, thus reducing frequency and costs. As for the batteries, electronic components and photovoltaic panels, these can be kept securely inside the structure, limiting the risk of theft and vandalism.

- ✓ Unrivalled energy efficiency on the market
- ✓ Electronic components and photovoltaic energy accumulators secured 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 e-mail notifications
- ✓ Uninterrupted power to critical equipment



The self-supporting SPT77 in the industrial district of Mascouche.



# Characteristics

The SPT series adapts to any natural environment, remaining in perfect harmony with its surroundings while preventing the emission of carbon dioxide.

Its entirely vertical design reduces the footprint, minimizing deforestation areas while protecting it from theft and vandalism. Its high-mounted photovoltaic panels, secured from the inside, remain out of reach and access to batteries is locked.



The SPT77 in the Bras-du-Nord Valley in Quebec, Canada.

SPT SERIES	DESCRIPTION
STRUCTURE	Made from durable, hard-wearing and robust aluminum alloy, the SPT tower performs well in all weathers, salty environments and over time. This material is 100 % recyclable and its light weight makes it easy to transport and assemble.
LARGE HEIGHT	The guying system allows the structure to reach heights of up to 94.25 m (309.22 ft) while maintaining excellent deflection properties.
AUTONOMY	Accommodates a multitude of battery technologies and configurations.
MODULAR	The modular design allows the height to be increased or reduced as required.
HYBRID	Designed as a completely autonomous device, the SPT can be combined with an electrical network and/or generator set to create a hybrid solution.
ADAPTABILITY	Innovative design makes the SPT tower adaptable to countless needs.
URBANISM	Esthetic and extremely sturdy, the self-supporting SPT harmonizes perfectly with urban environments. Several colors available to suit customer requirements.
INSTALLATION	The assembly structure is simple and fast and can be erected with or without a crane.

# Applications


The Smart Power Tower is a sophisticated, intelligent and unique solar tower that meets multiple needs.

Its modular design and optional guying system can be adapted to the needs of a given territory. Whether it's for lighting, level-crossing barriers, proximity sensors or satellite communication systems, SPT can supply all types of technologies without interruption.




The self-supporting SPT77 in the industrial district of Mascouche.

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




### TELECOMMUNICATION

Deploy 3G, 4G, 5G or LTE cellular networks and increase the communication range with satellite and microwave communication systems.




### SECURITY

Secures sites with a multitude of device types such as cameras, proximity sensors, speaker systems and emergency phones.




### ELECTRIFICATION

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



### LIGHTING

Several anchor points for the installation of outdoor luminaires such as street lights, wide-beam and narrow-beam directional lights and positioning lights.



### MULTI-TECHNOLOGY

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



# Technical specifications

## ✓ STRUCTURE

A 6061-T6 aluminum alloy structure using as little as 1.58 % of the space of a conventional solution for the same performance. The height can be adapted to customer requirements due to the device's modular design.

SPT TOWER MODEL	SPT44		SPT77	
	SELF-SUPPORTING	GUYED	SELF-SUPPORTING	GUYED
Width	1516 mm (4 ft 11 in 11/16)		2429 mm (7 ft 11 in 11/16)	
Depth	1516 mm (4 ft 11 in 11/16)		2429 mm (7 ft 11 in 11/16)	
Usable height (A)	Up to 31.24 m (102.5 ft)	Up to 91.64 m (300.65 ft)	Up to 30.76 m (100.92 ft)	Up to 92.28 m (302.75 ft)
Total height (B)	Up to 33.21 m (108.95 ft)	Up to 93.61 m (307.12 ft)	Up to 32.73 m (107.38 ft)	Up to 94.25 m (309.22 ft)
Type of support	None	Riggings struts	None	Riggings struts
Numbers of supports	-	Up to 16 (4 per side)	-	Up to 16 (4 per side)

## ✓ SOLAR

A vertical photovoltaic concept providing power up to 136.8kWp.

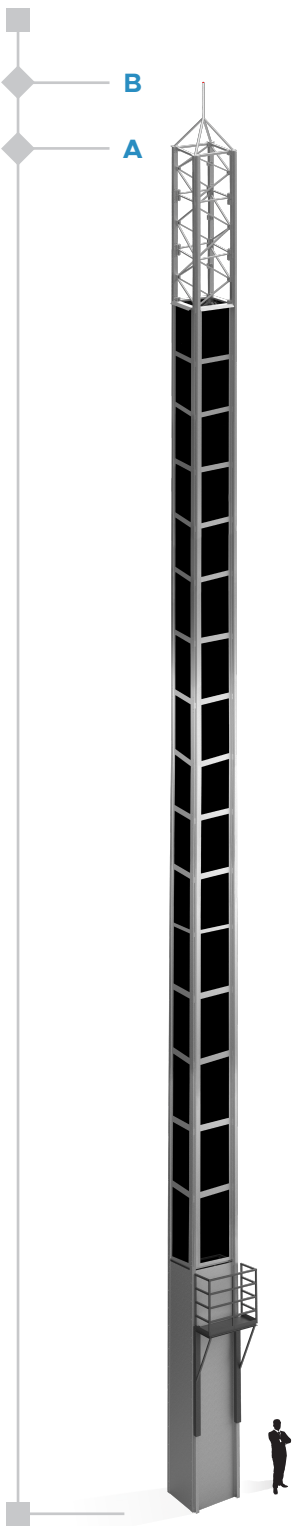
SPT TOWER MODEL	SPT44	SPT44	SPT77	SPT77
	SELF-SUPPORTING	GUYED	SELF-SUPPORTING	GUYED
PV panels Monocrystalline	Up to 19.8kWp	Up to 72kWp	Up to 36kWp	Up to 136.8kWp
Specific efficiency	Between 700 and 900kWh/kWp			

## ✓ WIND RESISTANCE

Laboratory tests exceed Canadian (CSA-S37-18), American (ASCE-7 + AINSI/TIA-222) and Eurocode (EN 1991-1) standards taking into account equipment with a total weight of 1 100 lb (500 kg) and a surface area equivalent to photovoltaic panels. Project-specific engineering.

## ✓ AVAILABLE OPTIONS

	SPT44	SPT77
Batteries	Batteries are installed inside the structure or combined in an external storage area. No capacity limit required.	
Hybrid systems	Electrical network and/or generator	
Service elevator	System enabling tower assembly and installation in locations inaccessible by crane. Can be transferred from one tower to another.	





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