

Solar-powered counting cabinet

Orange Traffic Wavetronix

Counting and sorting systems are more and more widely used to collect precious statistical data on road traffic. However, for material or economic reasons, it is not always possible to connect them to the electrical power and communication infrastructure.



Description

To solve this problem, Orange Traffic has designed a solar-powered counting system that uses cellular technology. This system is built around Wavetronix's SmartSensor HD radar, which is well adapted to the harsh climate of Québec and Canada and is one of the highest performing devices in its field.

The system can be installed on a tower or a trailer (not provided) according to the SmartSensor HD height and distance charts. It is composed of an cabinet that mounts to the base of the tower, a solar panel that is installed at the top of the tower, a SmartSensor HD radar detector as well as a lighting and voltage surge protector. The equipment is compact and easy to install.

This system is designed to make maximum use of the battery's load curves and optimize the storage of solar energy in all weather conditions.

The cabinet is built according to industry norms and standards for guaranteed sturdiness and high-quality mechanical design. As an option, it may be thermally insulated to minimize the impact of outside temperature variations.

The solar-powered counting cabinet may be equipped with a STS22W module to enable the automatic GPS synchronization of multiple radar clocks.

Specifications

Uses

- Temporary installations with or without electrical power supplies
- Hard-to-access locations
- Locations where wired communications are not necessarily possible
- Backup systems to provide constant power to strategically located sensors during power outages
- Shorter commissioning times (the system may be commissioned temporarily and then be

converted to a permanent wired system with backup power supply)

Performances

- Autonomy (fully charged): 7 days; operates for 3 days without sunlight under normal operating conditions

Enclosure characteristics

- Material: painted aluminium or stainless steel
- Dimensions: 61 x 107 x 46 cm (24 x 42 x 18 in.)
- Approximate weight (without the batteries):
 - Aluminium: 27 kg (60 lbs.)
 - Stainless steel: 64 kg (140 lbs.)
- Available certifications: CSA, UL, NEMA TS 2, 3R

Solar panel characteristics

High quality polycrystalline solar panel

For more information: 1 800 363-5913

Created on 06.01.2026 at 18:12:01 EST