



YUNEX  
TRAFFIC

## SiWalk

**The evolution of pedestrian  
safety**

Smart lightning crosswalk with  
automatic pedestrian detection



Yunex Traffic

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The information in this document contains general descriptions of the technical options available. The required features should therefore be specified in each individual case at the time of closing the contract.

For the secure operation of Yunex Traffic products and solutions, it is necessary to take suitable preventive action and integrate each component into a holistic, state-of-the-art security concept.

Third-party products that may be in use should also be considered.

# SiWalk

## A solution to improve pedestrian safety

A zebra crossing should be the safest place for a pedestrian to cross the road but, especially during darkness, there are many places which do not highlight the presence of a pedestrian.

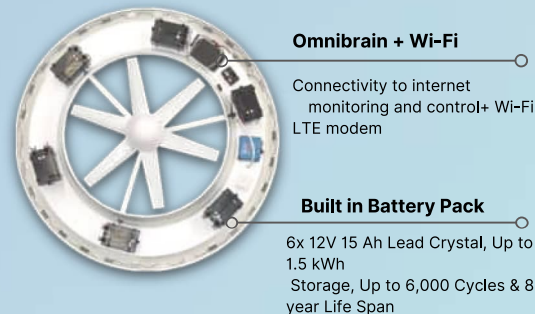
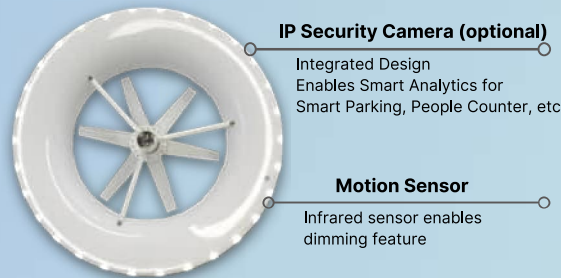
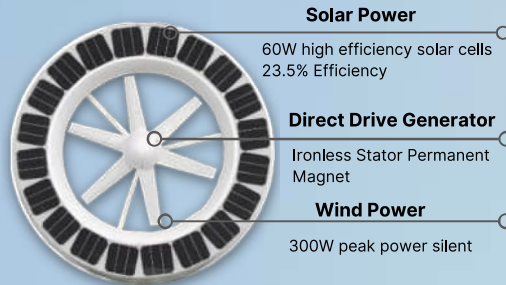
According to the European Road Safety Observatory, in average, 45% of pedestrian fatalities in EU occur during darkness. On top of this, cities are promoting soft modes and there is the need to give them safer ways to cross!

## SiWalk increases walkability!

SiWalk allows the road owners to enhance the importance of zebra crossings in their infrastructure with a suitable smart lighting method. The solution automatically detects which pedestrian intends to cross the road on the zebra crossing and highlights this to vehicles in three ways:

1. By an upper light which increases the power at least 2 x more on the area of the zebra crossing;
2. By turning on a backlit sign equipped with motion sensor to detect the pedestrian automatically;
3. And by turning on the high resistance ground illumination placed at each list of the zebra crossing this warning the vehicles that a pedestrian is crossing by.

The complete system is remotely controllable and can be monitored and programmed according to any local requirements. Yunex Traffic can provide the system directly connected to the electric grid or with an autonomous energy production system, using a micro generation unit called Omniflow, which combines wind and solar energy and stores it with high tech batteries.



## Backlit vertical signs

When a pedestrian is detected, the controller turns on the backlit vertical signs to warn the vehicles that a pedestrian is crossing.

At the same time, the ground illumination is also turned on to increase visibility. The power can be provided from the grid or from a set of batteries



## Ground Illumination

Each zebra crossing has two backlit pavement squares of 0.5 meters each side.

Backlit vertical signs

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These squares light up when a pedestrian is crossing the road and can be separate into sections. The system can work at 230 VAC or 12 VDC.