



*Protecting every pedestrian with a  
Smart-City ready solution*



**NEOS**  
COMPATIBLE

With increasing **traffic congestion**, **poor visibility** at pedestrian crossings, and **unpredictable weather** conditions, the risk of accidents involving pedestrians remains alarmingly high.

In response to these challenges, **Urbio** has developed **CrossGuard**, an innovative, **Smart City-compatible** solution designed to enhance pedestrian safety through intelligent lighting and warning systems. By integrating **advanced sensors**, **adaptive LED lighting**, and **remote communication** technology, **CrossGuard** not only improves visibility but also actively detects pedestrian movement, traffic conditions, and environmental factors such as fog, rain, and snow.



**38%** of road accidents occur in urban areas

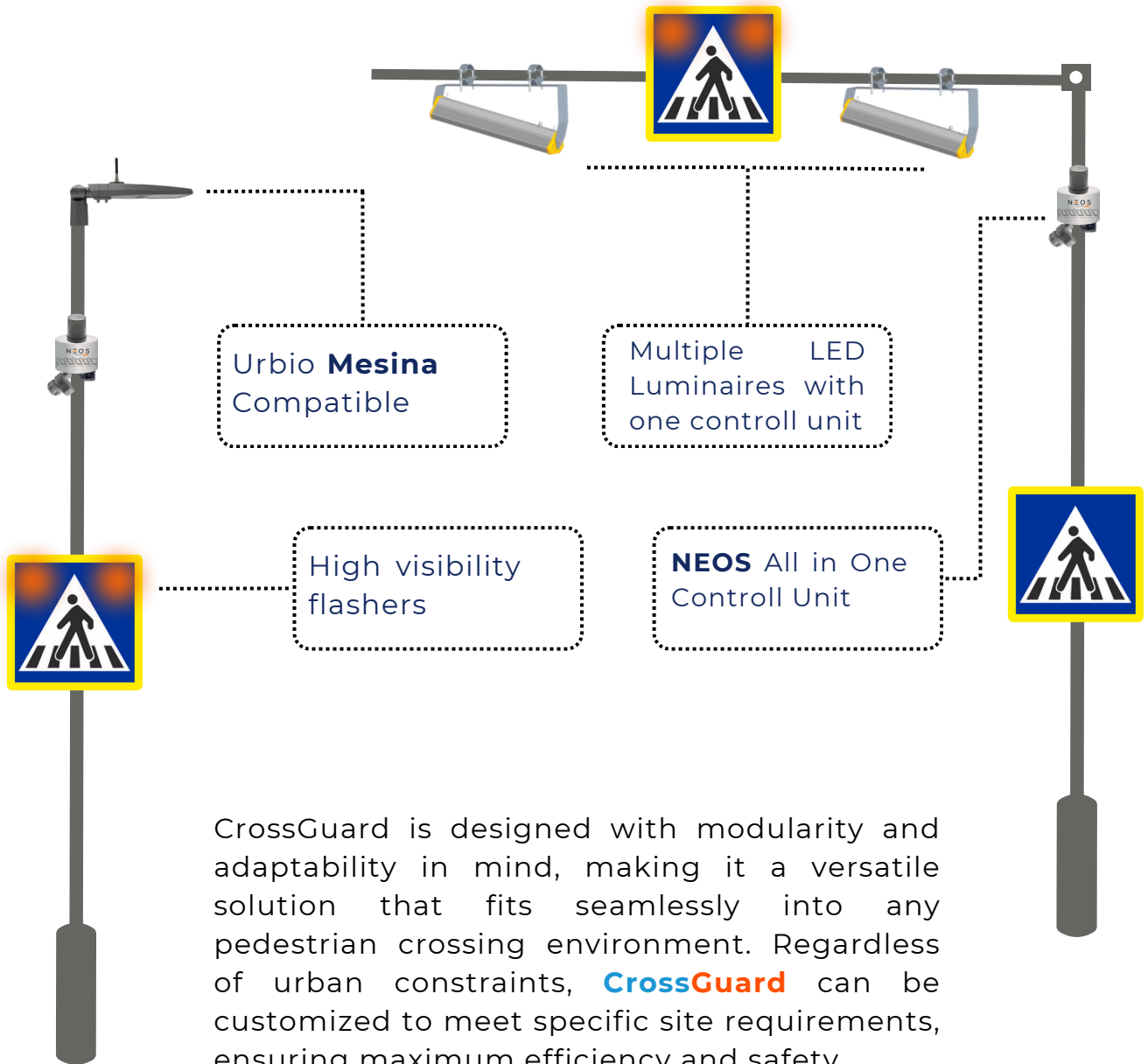


**>20%** of traffic accidents involve a pedestrian

- ✓ Reduces the risk of accidents
- ✓ Automatically adjusts lighting
- ✓ Uses radar and optical sensors
- ✓ Detects fog, rain, and snow
- ✓ Flashing LED indicators
- ✓ Uses high efficiency LED
- ✓ Allows Remote Control with CMS
- ✓ Easy to install

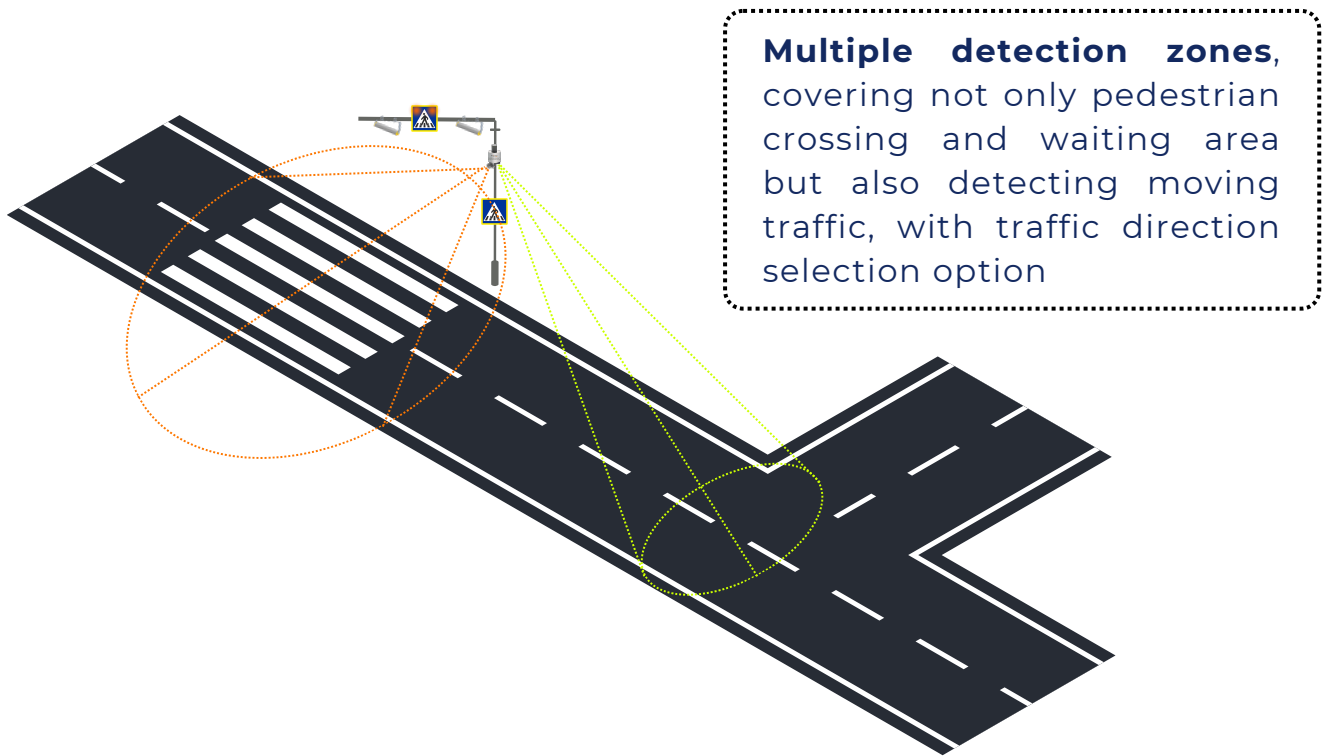
**50%** less road accidents is the EU target for 2030



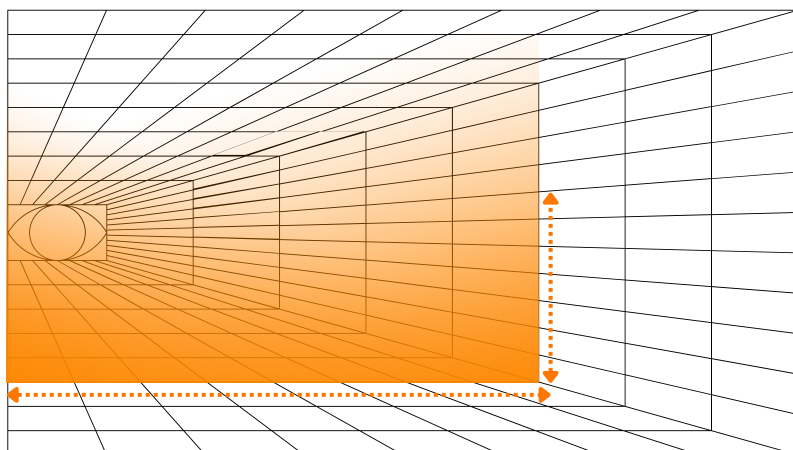
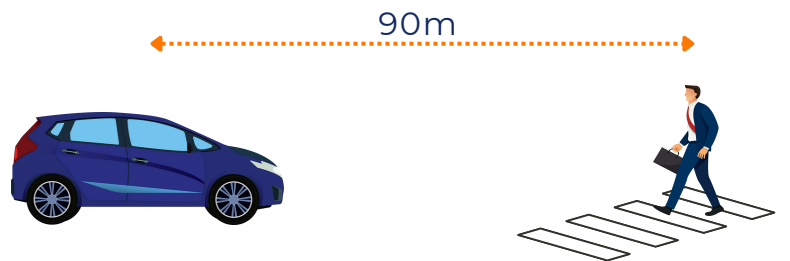


CrossGuard is designed with modularity and adaptability in mind, making it a versatile solution that fits seamlessly into any pedestrian crossing environment. Regardless of urban constraints, **CrossGuard** can be customized to meet specific site requirements, ensuring maximum efficiency and safety.





Engineered to detect pedestrians and vehicles at an early stage, with **almost instantaneous** reaction.



Optimized design for **vertical illuminance** that helps motorists to see the pedestrian from a safe distance



Adaptive mounting system, allowing for both vertical and horizontal adjustments

Fast and reliable connectors

Li-Ion Battery Cell for Blinkers continuous functionality



Optional LED strip for better visibility

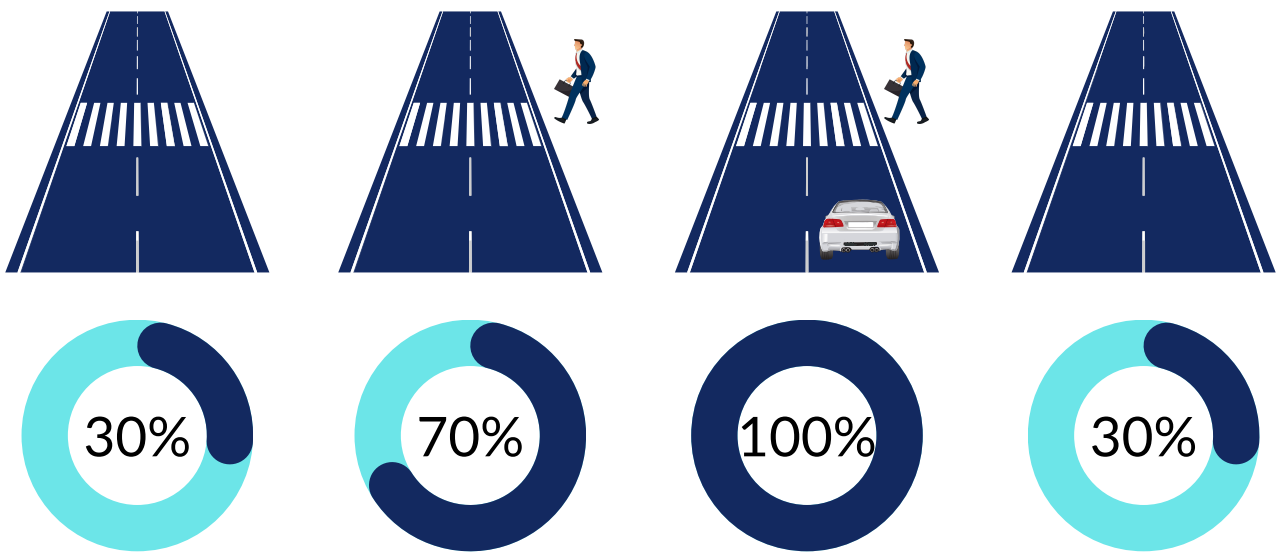


High visibility flashers



High durability reflective film





Road Sign

Parameter	Unit	Value
Dimmensions	mm	650X650
Construction material	-	Aluminium
Mounting system	mm	60-80 & 35-50
Finishing	-	Reflective film
Battery capacity	Wh	88.8
Battery technology	-	Li-Ion
LED strip power	W	9
LED strip housing	-	Aluminium
LED strip efficiency	Lm/W	100
Protection degree	IP/IK	IP65/IK10

Blinkers

Parameter	Unit	Value
Power	W	2
Input Voltage	VDC	12
Housing	-	PC/Aluminium
Dimmensions	mm	125
Number of LEDs	pcs	60

Multidimensional LED Luminaire

Parameter	Unit	Value
Power	W	60-180
Input Voltage	Vac/Hz	230/50
Efficiency	Lm/W	120
Housing	-	Aluminium
CCT	K	3000-6000
Number of Luminaires/System	pcs	1/2

Central Unit

Parameter	Unit	Value
Communication Technology with CMS	-	LoRa/PLC/GSM
Detection Technology	-	Optical/Radar
Types of detection	-	Movement/ Environment
Number of sensors	pcs	2/4
Housing	-	PMMA

## INTEGRATED

**CrossGuard** is fully compatible with the **NEOS Lighting** Management System, allowing for centralized monitoring and control from the same Smart City platform as the public lighting system.

- ☑ Unified Management – Enables cities to monitor and control both pedestrian safety lighting and public streetlights from a single interface.
- ☑ Real-Time Monitoring & Adjustments – Provides instant status updates and allows for remote adjustments to lighting intensity, activation settings, and warning signals.
- ☑ Optimized Energy Efficiency – Smart integration ensures synchronized operation, reducing unnecessary power consumption while maintaining maximum safety.

Scalable Smart City Solution – CrossGuard and NEOS work together to create a fully connected, intelligent urban lighting ecosystem.

