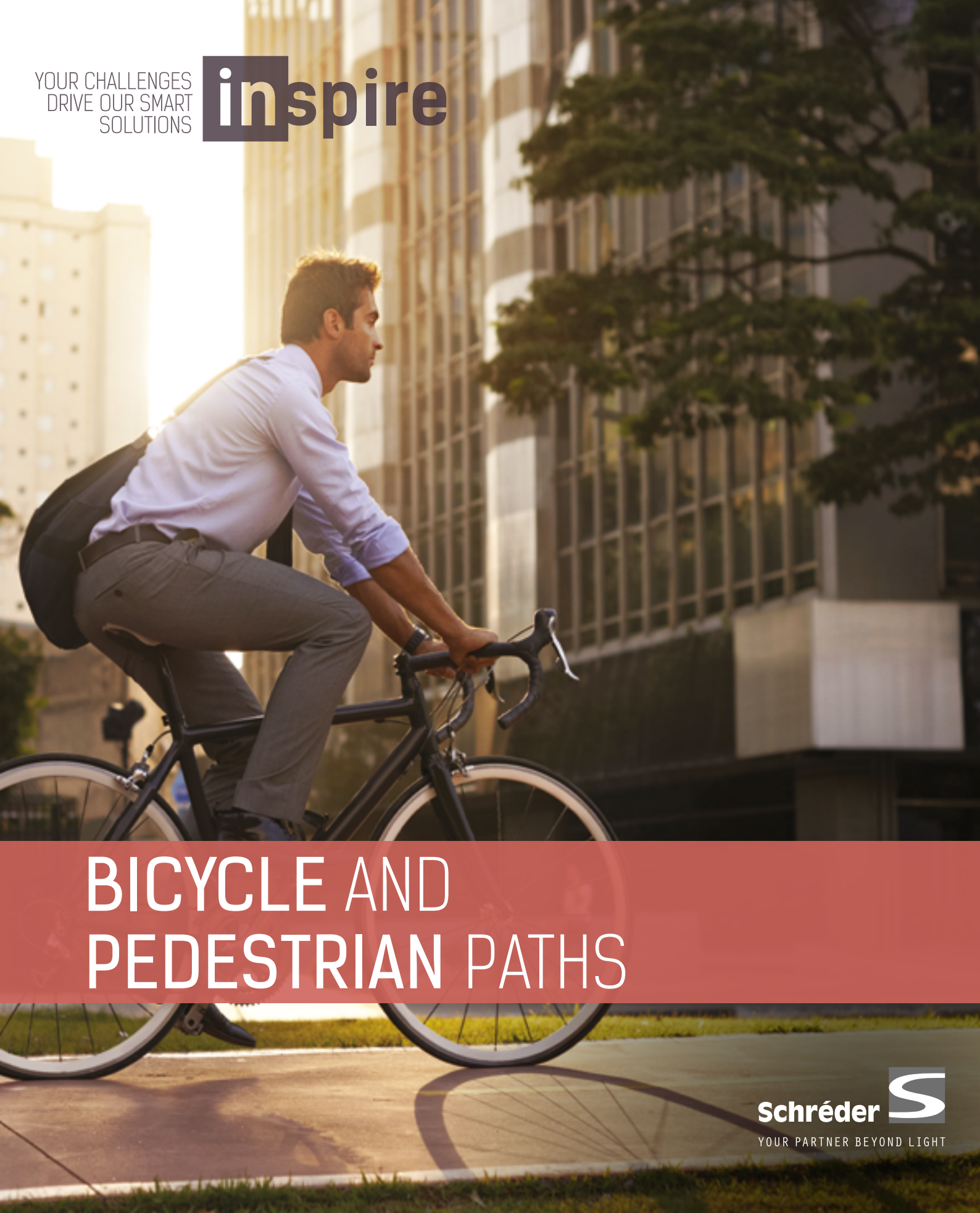
YOUR CHALLENGES
DRIVE OUR SMART
SOLUTIONS

inspire



BICYCLE AND PEDESTRIAN PATHS

Schréder

YOUR PARTNER BEYOND LIGHT

YOUR CHALLENGES **DRIVE OUR SMART SOLUTIONS**

WHY MOBILITY 2.0 AND SOCIETY CHALLENGES

TOWARDS **ZERO EMISSION MOBILITY**

Increasing zero emission mobility is crucial to lower the carbon footprint of human activities.

A lot of our daily trips are quite short. Even in countries where the car is king, due to cultural habits or poor public transport, daily journeys can be surprisingly short. The average one-way journey in the USA for example is only 9.5km. Nowadays it is very easy to get these statistics from GPS systems.

REDUCING TRAFFIC CONGESTION AND **SOLVING** CAR PARK SHORTAGES

Travelling by bicycle or by foot means less cars on the roads which reduces traffic congestion. It is a virtuous circle. However, there is a `but' to this assertion. A recent study shows that when more people travel more by bicycle, but that the number of bicycle lanes is not increased, traffic congestion actually gets worse.

If specific bicycle paths are not created, cyclists struggle to share the traffic lanes with motor vehicles. Yet, if more bicycle lanes exist, this active mode of transport creates a win-win solution. It has been proven that reducing the number of cars by 10% can reduce traffic congestion by 40%. High levels of traffic congestion and accidents lower the quality of life for people. Efficient alternative and environmentally-friendly modes of transport are key to not only improve mobility but the quality of life as well.

PROMOTING **PUBLIC HEALTH**

A lack of physical activity has been identified as the fourth leading risk factor for global mortality. One out of three adults is not active enough according to the World Health Organisation. Physical activity should not be confused with sport. It is defined as any body movement that uses energy. This includes sports and other activities such as walking, skating or cycling.

Urban and environmental policies have a huge potential to increase the physical activity levels of the population. By providing safe and accessible facilities for users, more people will choose active transportation and consequently adopt a healthier way of living.

EXTENDING PEOPLE'S **COMFORT ZONE TO OUTDOOR VENUES**

Large and very open areas are places where people engage and socialise. They are far more than simple paths dedicated to mobility. These spaces are real eco-systems. They encourage social interactions between people and generate a lot of expectations from the organisations surrounding the area, whether they are commercial, educational, recreational or for public use.

People like to spend time in these outdoor venues as long as they are safe, structured and properly equipped.

WHERE

ANALYSIS OF THE ENVIRONMENT

ANALYSING THE TOPOLOGY OF AREAS DEDICATED TO ACTIVE MOBILITY LED TO THE CONCLUSION THAT THEY CAN BE DIVIDED INTO THREE MAIN CATEGORIES.

BICYCLE LANES / JOGGING TRACKS

Inside or outside a city, these paths are literally small roads dedicated to cycling, running and other modes of active mobility. The average speed is quite high as they are mainly used for commuting traffic.

They usually include crossroads to allow users to join from different entrance points. Some of these environments are designed to be used by both cyclists and pedestrians. But they can also have dedicated lanes, whether they are physically separated or demarcated by painted lines.

These fast routes can be adjacent to a main road or totally apart, in their own environment. They can pass through remarkable natural areas where protecting the fauna and flora is very important. They can also include small underpasses and bridges.

The common characteristic is that people use them mainly for practical reasons, to travel from point A to point B. They are used irregularly and sometimes unused for long periods.

URBAN AND SUBURBAN SHORTCUTS

In the city and in the suburbs, these are often narrow roads used as shortcuts by the local population or by tourists if they are located in a historical centre. They can be small passages, back streets, alleys, back garden entrances...

These shortcuts are not places where you naturally enjoy spending time because they are confined and often poorly lit even during the day. They can generate an unsafe feeling. Usually, people use these routes because they are convenient.

These areas are designed to be practical when you want to save time, to access a building, to avoid crowded places... They usually have very few entrances.

LEISURE AREAS

These areas are really big spaces: they usually have a lot of entrance points and might even be completely open. They are used for lots of different activities including leisure, commercial and professional purposes. People come to stroll, to take a break, to have lunch, to relax or to enjoy the nature. They may be used as recreational areas 24 hours a day. They include large squares, parks, esplanades, piers and seafronts.

These multi-purpose areas are important for the identity, the reputation and the appeal of a town centre, a resort, a university campus, a shopping centre or any other place designed for social interaction, active mobility and leisure.

WHERE

KEY **TOPOLOGY FACTORS**

THE WAY TO FURNISH AN ENVIRONMENT DEPENDS ON ITS LAYOUT. AN IN-DEPTH ANALYSIS OF THE ENVIRONMENT WILL INFLUENCE THE MATERIAL TO BE USED, ITS POSITION AND THE LIGHTING SCENARIO TO BE PRE-PROGRAMMED. ANSWERING THESE QUESTIONS WORKS LIKE A KIND OF CHECKLIST TO HELP DEVELOP THE BEST SOLUTION.

- WIDTH
- PROFILE
- ACCESS
- OBSTACLES
- USE
- LOCATION

WIDTH

› Is the path only for cyclists or pedestrians? Or is it designed for all kinds of active mobility?
› Is it large or very narrow?

PROFILE

› Is it a straight line or a winding path?
› Is it flat or uphill/downhill?
› Does it include a bridge and/or an underpass?

ACCESS

› How many access roads/entry points are there?
› Does it include junctions with roads for motorised vehicles?
› Is it totally open?

OBSTACLES

› What kind of obstacles are there in the environment? Trees? Walls? Statues?
› Where are they located?

USE

› Is it only a place where people pass through or do they spend time in the area?
› Does it include recreational facilities such as a playground, a skate park or an outdoor stage?

LOCATION

› Is it inside the city or in the countryside?
› Is it a private or a public space?

WHO

Schréder

AFFORDABLE SOLUTIONS WITH HIGH ADDED-VALUE

SOLUTIONS

SCHRÉDER HAS DEVELOPED A COMPREHENSIVE APPROACH TO OFFER FULL SCOPE SOLUTIONS FOR BICYCLE AND PEDESTRIAN PATHS FROM DESIGN TO AFTER SALES SERVICES, INCLUDING ADAPTIVE LIGHTING, INTELLIGENT CONTROL SYSTEMS, SECURITY EQUIPMENT, SIGNAGE AND IDENTITY CREATING TOOLS, LOUDSPEAKERS, WLAN AND MANY OTHER SMART FEATURES. OUR DEDICATED SOLUTIONS TRANSFORM BICYCLE LANES AND PEDESTRIAN AREAS INTO SAFE, COMFORTABLE, SUSTAINABLE AND SMART ENVIRONMENTS WITH ENGAGING EXPERIENCES FOR THE USERS AND OPERATIONAL BENEFITS FOR THE MANAGERS.

SAFETY

Effective adaptive lighting can help to anticipate and prevent disturbances, danger and violence at crucial moments. It enables people to avoid obstacles, to see and be seen. It can stop inappropriate behaviour and facilitate operations for emergency services.

Sensors and cameras can contribute to detecting danger, emergency marking and crowd management in popular areas. CCTV enables security services to monitor the area and to make the right decisions in real time.

Loudspeakers can broadcast specific messages in emergency situations.

Thanks to reporting features, maintenance services can monitor an area and carry out specific interventions when safety might be compromised.

WELL-BEING

Creating attractive spaces both by day and by night is strongly influenced by both the ambiance and the facilities that the place has to offer. In addition to clean, safe and well-lit areas, people like to find features that help and entertain them. Schréder contributes to creating this added-value by providing aesthetic equipment with integrated features such as sound systems, Wi-Fi and electric vehicle chargers.

We aim to create outside environments with an inside feeling. This improves the quality of life for people using the area and benefits the local economy.

SUSTAINABILITY

Preserving the environment is a collective obligation. Schréder uses recyclable materials for its' efficient bicycle and pedestrian path solutions. By combining the best of LED technology with a wide range of control systems, our solutions offer huge energy savings of up to 85% and help to reduce the carbon footprint.

In addition, the management system provides crucial information for organising maintenance operations in the most sustainable way, avoiding unnecessary long distance journeys.

SAVINGS

Our philosophy is to offer a minimised total cost of ownership and a short payback time. With highly-efficient LEDs and advanced control systems, we provide lighting solutions with maximum performance and energy savings. The long lifespan of our solutions including the beyond light features dramatically reduces maintenance operations.

With more enjoyable environments, people spend more time and money in local businesses, increasing the return on investment for the investor.

COMPONENTS AND FEATURES WE OFFER

LUMINAIRES

SCHRÉDER PROVIDES THE LASTEST GENERATION LED LUMINAIRES WITH INTELLIGENT DRIVERS THAT ARE DESIGNED TO INCORPORATE CONTROL SYSTEMS. OUR RANGE ENCOMPASSES LUMINAIRES THAT ARE DESIGNED FOR ALL TYPES OF LIGHTING REQUIREMENTS AND INSTALLATION LAYOUTS IN BICYCLE AND PEDESTRIAN AREAS. WE PROPOSE BOTH SYMMETRICAL AND ASYMMETRICAL PHOTOMETRIES AS WELL AS A BACK LIGHT CONTROL SYSTEM TO REDUCE LIGHT POLLUTION AND TO PREVENT INTRUSIVE LIGHTING.

TYPE	RECOMMENDED INSTALLATION HEIGHT	INSTALLATION	TYPICAL LUMEN PACKAGE	LEDs	INTEGRATED DETECTION DEVICE	DYNAMIC LIGHTING
Road	3.5 to 6m	Post-top / side-entry	1,000 to 40,000lm	Cool, neutral or warm white	PIR or camera	Intelligent drivers compatible with LuCo-P7, LuCo-NXP and LuCo-ADP
Decorative	3.5 to 5m	Post-top	1,000 to 6,000lm	Neutral or warm white	PIR or camera	Intelligent drivers compatible with LuCo-P7, LuCo-NXP and LuCo-ADP
Catenary	3.5 to 5m	Suspended	2,400 to 6,000lm	Neutral or warm white	PIR	Intelligent drivers compatible with LuCo-P7, LuCo-NXP and LuCo-ADP
Underpass	0.8 to 5m	Ceiling / wall	1,000 to 6,000lm	Neutral or warm white / blue or amber (beacons) / RGB	None	Intelligent drivers compatible with MoovBox and MoovBox-P
Recessed	om	Embedded	‹1,000lm	Cool, neutral or warm white / red, green or blue	None	None
Handrail	1 to 1.5m	Integrated in a guardrail	‹2.500lm	Cool, neutral or warm white / red, green or blue	None	Intelligent drivers compatible with MoovBox and MoovBox-P
Bollard	0.3 to 1m	Ground	‹1,000lm	Neutral or warm white / red, green or blue	None	Intelligent drivers compatible with MoovBox and MoovBox-P

OWLET CONTROLLERS

owlet

THE LUMINAIRES ARE PRE-PROGRAMMABLE (IN THE FACTORY), WIRELESS PROGRAMMABLE (ON-SITE) OR REMOTELY PROGRAMMABLE AND CONTROLLABLE (INTEROPERABLE). EACH INDIVIDUAL LIGHT POINT CAN BE SWITCHED OFF/ON OR DIMMED AT ANY TIME. THE OPERATING STATE, ENERGY CONSUMPTION AND FAILURES ARE REPORTED AND STORED IN A DATABASE WITH THE EXACT TIMESTAMP AND GEOGRAPHICAL LOCATION. OWLET HELPS LIGHTING MANAGERS TO ASSURE THE RIGHT LIGHTING LEVEL WHILE REDUCING OPERATING COSTS AND MAINTAINING A SUSTAINABLE OUTDOOR LIGHTING SCHEME. DIFFERENT VERSIONS OF THE WIRELESS LUMINAIRE CONTROLLERS (LUCO) ARE AVAILABLE. THEY ARE ALL COMPATIBLE WITH EACH OTHER.

LuCo-NXP: Luminaire Controller integrated inside the luminaire with a shark fin antenna on top. This luminaire controller communicates via a wireless network with the luminaires nearby as well as with the central management system in a bi-directional mode. It is the cornerstone of an interoperable network. The in-built power supply offers a direct link with a PIR-sensor integrated in the same luminaire.

LuCo-ADP: Wireless individual Luminaire Controller to manage a cluster of luminaires, known as an autonomous network. The LuCo-ADP is integrated inside the luminaire with an antenna on the top. Sensors and luminaires interact dynamically with each other according to a preset event/profile matrix.

LuCo-P7: Luminaire Controller mounted on top of the luminaire. The controller fits in a standard 7-pin Nema-socket base. This controller is additionally equipped with a photocell and GPS antenna which strongly facilitates the commissioning process of the installation, while the exact geographical location is directly transmitted to the server.

The LuCo-NXP and ADP are commissioned with the Owlet NightShift web GUI (Graphical User Interface) using a wireless handheld device that allows automatic geo-positioning.

MOTION AND/OR PRESENCE DETECTION

MOTION/PRESENCE DETECTION IS COMPATIBLE WITH ANY TYPE OF CONTROL OR DIMMING SYSTEM. IT WILL ENHANCE THE EFFICACY OF THE INSTALLATION BY INCREASING THE LIGHT LEVEL ONLY WHEN A CYCLIST, A PEDESTRIAN OR A VEHICLE IS DETECTED.

The precise detection area depends on the type of sensor, how it is installed (height and orientation) and possible restrictions in the area (obstacles).

The settings of the luminaire controller will determine the dimming level, the temporization (the length of time a luminaire is switched on when presence is detected, the ramp-up time and the fade time) and when the sensor is idle or in detection mode.

Schréder offers 3 types of detection devices with different characteristics.

	PIR sensor	Radar	Camera
Typical applications	Paths with multiple entrances – lighting levels increase as pedestrians/ cyclists arrive	› Paths with limited entrances – whole path lights up › Junctions with cars	› Security (with local recording) › Detection is an additional benefit
Installation	On all/multiple poles for a cluster of luminaires	On selected poles for a cluster of luminaires	In selected luminaires for specific areas
How it works	Detects moving heat (infrared rays)	Detects movement (Doppler detection)	Detects direction of movements (digital analysis)
Max. operating range/detection area	14m (length) per 8m (width)	100m	30m
Selective detection	By physical zone masking	By determining a speed range	By image treatment
Market positioning	Entry	Performance	Premium

COMPONENTS AND FEATURES WE OFFER

MOOVBOX AND MOOVBOX-P

THE SCHRÉDER MOOVBOX (-P) PROVIDES A VERSATILE SOLUTION TO COMBINE SENSORS, LUMINAIRES AND CONTROL SYSTEMS.

This IP 66 die-cast aluminum device integrates multiple functions:

› it serves as an extra “hop” in the wireless network in order to overcome large distances or avoid obstacles;

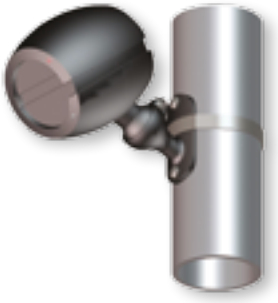
› it enables an extra sensor to be integrated into the system, which is not linked to a specific luminaire. This application can be used both in autonomous and interoperable networks;

› it might be used in conjunction with a radar motion sensor to detect moving objects at an entrance, exit or junction to transmit the ‘trigger’ to the lighting system.

The MoovBox (-P) does not necessarily have to be placed on the poles of the associated luminaire(s). They can be placed at the entrance/exit/junction of any other area to detect the event and activate one or more luminaires. They are ideally suited for adaptive light-on-demand lighting scenarios.

SENO

THE SENO (SENSOR NODE) IS A STAND-ALONE UNIT THAT COMBINES A SENSOR (EITHER PIR OR RADAR) AND A ZIGBEE COMMUNICATION MODULE TO ENABLE A WIRELESS INTEGRATION INTO THE OWLET NIGHTSHIFT NETWORK. THE SENO CAN BE INTEGRATED INTO AN AUTONOMOUS OR INTEROPERABLE SYSTEM.



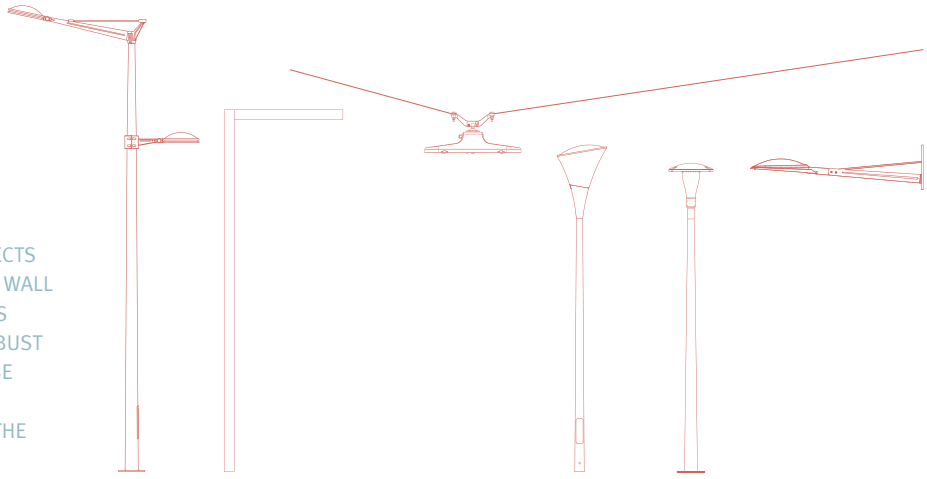
When a sensor is triggered, the event is directly communicated via the mesh network and activates the connected lighting points to switch them on or to increase the lighting level.

The compactness, robustness and light weight of the SeNo means that it can be discreetly integrated on to a luminaire pole or any other bracket.

This unit is an important component to create an efficient lighting system for a bicycle path.

POLES & BRACKETS

SCHRÉDER DESIGNS, DEVELOPS AND SELECTS DEDICATED POLES, COLUMNS, BRACKETS, WALL BRACKETS AND MOUNTING PLATES FOR ITS LUMINAIRES TO CREATE ELEGANT AND ROBUST ENSEMBLES. POLES AND COLUMNS CAN BE STRAIGHT, ROUND, CYLINDRICAL-CONICAL OR SQUARE TO ENHANCE THE DESIGN OF THE LUMINAIRE.



CCTV

CCTV CAMERAS CAN BE INTEGRATED INTO SOME OF OUR LUMINAIRES TO REINFORCE SAFETY AND TO CARRY OUT EFFICIENT SELECTIVE DETECTION.

With HD optimised images (perfect night vision efficiency, high brightness compensation, defog feature, digital image stabilisation...), private zone masking, selective local storage and efficient transmission via improved bandwidth utilisation features, our CCTV cameras are cutting-edge safety devices using the ONVIF Profile G interoperable communication standard.

WLAN

WIRELESS LOCAL AREA NETWORK (WLAN) IS A WIRELESS COMPUTER NETWORK THAT LINKS TWO OR MORE DEVICES USING A WIRELESS DISTRIBUTION METHOD WITHIN A LIMITED AREA. THIS GIVES USERS THE ABILITY TO MOVE AROUND WITHIN A LOCAL COVERAGE AREA AND STILL BE CONNECTED TO THE NETWORK AND CAN PROVIDE A CONNECTION TO THE WIDER INTERNET.

Our modern WLANs are based on IEEE 802.11 1 standards, marketed under the Wi-Fi brand name.

The Schréder range includes two types of WLAN: wired network (or Campus infrastructure) and mesch network (or City Infrastructure).

The wired network extends an indoor WLAN network to the outdoor environment (around a company building, small park area, university campus...). The module is programmed as an Access Point (wired) or a Repeater (non-wired). This module allows a CCTV camera to be connected to an existing WLAN network.

The mesch network is a Wireless LAN network dedicated to city infrastructure. A gateway device is connected to a “backbone” and provides network access for the devices on the network: the nodes. The combination of nodes and gateways provide WLAN to all end devices. The nodes are integrated into the luminaires while the gateways are fixed separately on a building or pole.

The mesch network can typically be used for the following applications:

- **Public hotspot**
- **CCTV**
- **Smart grid**
- **Connecting various city departments** like the fire brigade, police department, department of energy, intelligent transportation system, public safety system and services
- **Automation** purposes
- **Mobile workforce** management

COMPONENTS AND FEATURES WE OFFER

LOUDSPEAKER

SCHRÉDER PROPOSES A PUBLIC ADDRESS SYSTEM (PA SYSTEM) AS AN ELECTRONIC SOUND AMPLIFICATION AND DISTRIBUTION SYSTEM WITH A MICROPHONE, AMPLIFIER AND LOUDSPEAKERS. IT IS USED TO ADDRESS A LARGE PUBLIC, FOR EXAMPLE FOR ANNOUNCEMENTS IN PUBLIC AREAS, INSTITUTIONAL AND COMMERCIAL BUILDINGS AND LOCATIONS.

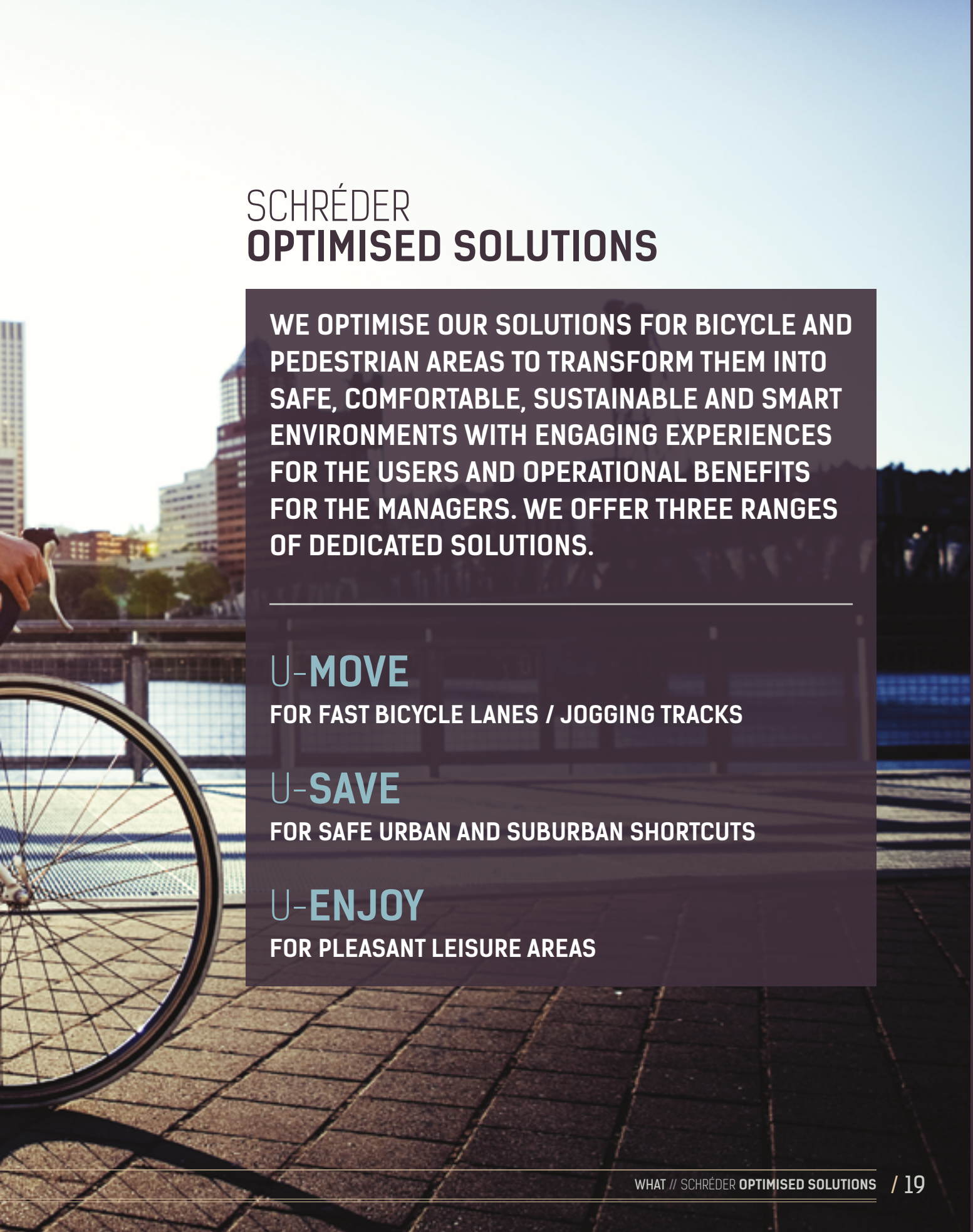
By using back to back transformers, it is possible to transmit the audio power over larger distances, because the increased voltage on the lines reduces the current for a given power and by consequence will reduce losses (e.g. high voltage power lines).

SOLAR ENERGY

FOR SUSTAINABILITY REASONS OR WHEN AN ELECTRICAL GRID IS NOT-AVAILABLE, SOLAR ENERGY IS AN INTERESTING ALTERNATIVE.

Schréder has developed a specific solution incorporating a monocrystalline 90-95 Wp photovoltaic panel and a 60Ah electrolyte (gel) battery - maintenance free - housed at the base of the column (estimated average autonomy of 12 hours; a 130Ah battery with an average autonomy of 24 hours is also available) and luminaires equipped with a specific solar energy driver.

WHAT



SCHRÉDER
OPTIMISED SOLUTIONS

WE OPTIMISE OUR SOLUTIONS FOR BICYCLE AND PEDESTRIAN AREAS TO TRANSFORM THEM INTO SAFE, COMFORTABLE, SUSTAINABLE AND SMART ENVIRONMENTS WITH ENGAGING EXPERIENCES FOR THE USERS AND OPERATIONAL BENEFITS FOR THE MANAGERS. WE OFFER THREE RANGES OF DEDICATED SOLUTIONS.

U-MOVE

FOR FAST BICYCLE LANES / JOGGING TRACKS

U-SAVE

FOR SAFE URBAN AND SUBURBAN SHORTCUTS

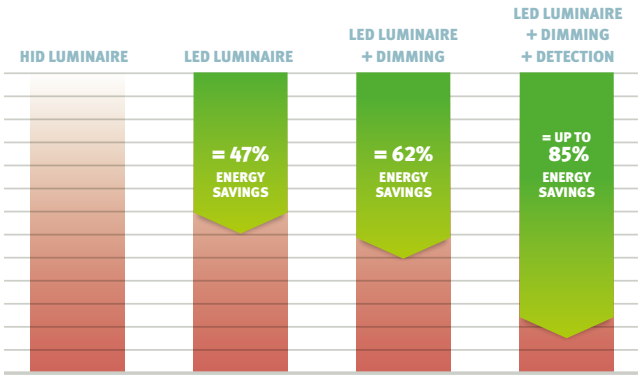
U-ENJOY

FOR PLEASANT LEISURE AREAS

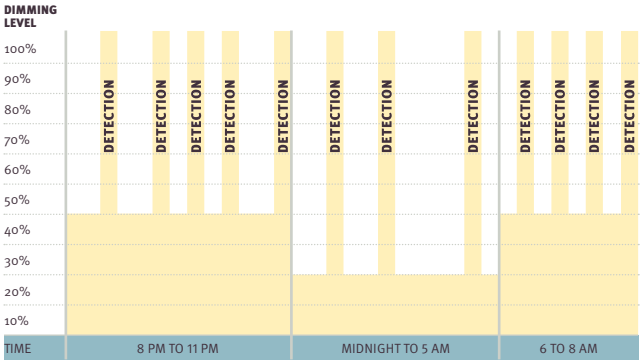
U-MOVE

SAFETY WITH **MAXIMISED ENERGY SAVINGS**

In these environments, people move quite fast and need light to safely guide them on their way. As these areas are used sporadically, the detection scenario will focus on ensuring safety when people are present and maximising energy savings when nobody is using the environment.

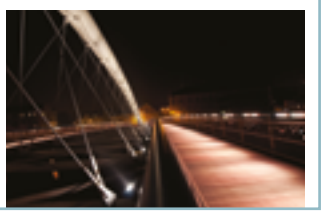


TYPICAL DIMMING SCENARIO WITH **DETECTION**



ADAPTIVE LIGHTING SCENARIO: the lighting levels of the luminaires increase along a long section of the path thanks to the detection and stay at that level as the users pass by. The smooth transition in lighting levels offers safety and comfort to the users.

AN UNDERPASS OR A BRIDGE CAN BE INCLUDED IN THE SAME ADAPTIVE SCENARIO with an increased lighting level when a user approaches thanks to detection on the path and communication with the luminaires in the underpass/bridge or handrail luminaires.

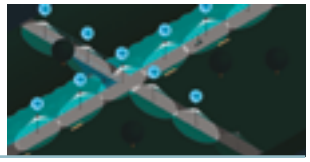


ROBUST LED LUMINAIRES with high impact resistance (vandal proof), low power consumption, low maintenance requirements and integrated controllers.

BACK LIGHT CONTROL AND WARM WHITE LEDs to preserve the biodiversity.

For off-grid sections, **SOLAR ENERGY CAN BE USED.** Luminaires can be triggered by a LuCo-P7 (photocell) with a dimming profile.

DETECTION VIA AN INTEGRATED PIR, A MOOVBOX-P OR A SENO commanding a cluster of luminaires to offer 100% lighting in front of the user, whatever direction he/she chooses.



*See how it works on the official **Schréder Group YouTube Channel**. Type Schréder+adaptive+bike*

JUNCTIONS WITH ROADS can use radar detection to increase the lighting level of the bicycle and pedestrian path when a car arrives. Schréder proposes dedicated 'zebra' crossing photometries.

KEY ELEMENTS

- LED lighting
- Detection on pole and remotely (PIR)
- Dimming scenarios with short hold time
- Preserving the natural environment
- Lighting scenarios to maximise energy savings
- Solar energy

U-SAVE

NICE AND SAFE ENVIRONMENT

These environments enable pedestrians and cyclists to take shortcuts that cannot be accessed by motorised vehicles. Users cannot move fast as the pavements and roads are narrower and the area is more crowded. They usually have junctions with other passages or streets. As they may accomodate shops, restaurants or other commercial activities, people may be out for a walk and make regular stops during the day and in the evenings. It is essential to provide a secure and pleasant environment for all users. These passages allow users to save time and to shorten their journeys but they will only take them if they feel comfortable and safe.

DETECTION VIA INTEGRATED PIR, SENO, MOOVBOX-P OR CAMERA (avoiding animal detection): commands a cluster of luminaires to provide full lighting levels in a section of the area.

DECORATIVE LED LUMINAIRES WITH VISUAL COMFORT, low power consumption, low maintenance and integrated controllers that can be connected to the Owlet control system.

CATENARY LUMINAIRES are ideal for very narrow streets.

BI-DIRECTIONAL COMMUNICATION to control (adapt the dimming/ detection scenario) and monitor the lighting scheme.

In critical zones, **INTEGRATED CCTV CAMERAS** can be used for safety and selective detection.

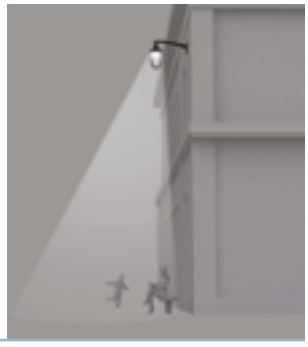
Thanks to the MoovBov-P and the SeNo, the **SENSOR CAN BE DISTANT AND PLACED AT STRATEGIC POINTS.**

The lighting levels remain at 100% for a long time so that the users can slow down, **STOP AND CONTINUE. THE SMOOTH TRANSITION BETWEEN THE LIGHTING LEVELS** provides safety and comfort to the users.

KEY ELEMENTS

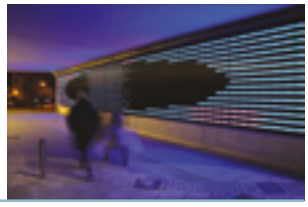
- Decorative LED lighting
- Detection on pole and remotely (PIR or camera)
- Dimming scenarios with long hold time
- Bi-directional communication (interoperable network)
- Photocell
- CCTV

BACK LIGHT CONTROL to prevent intrusive lighting towards buildings.



In areas with poor levels of natural light, a **PHOTOCELL** can switch on the luminaires when there is little natural daylight.

In urban areas, pedestrian and bicycle underpasses can be enhanced by **DYNAMIC LIGHTING**.



U-ENJOY

QUALITY INTERACTIONS, LEISURE AND SERVICES

Specifically designed for spaces where people like to wander and relax, the U-Enjoy solutions focus on safety, well-being and entertainment to create nice multi-purpose environments. These areas are carefully designed with regards to their main purpose and to accommodate a range of users. A path is not designed the same way as a playground in terms of adaptive lighting, safety and additional features as they are used in totally different ways. As leisure areas may be used 24 hours a day, the scenario concentrates on the attractiveness of the place as well as the role it plays in the social and economic fabric of the area.

MULTI-FUNCTIONAL LED LUMINAIRES integrating controllers and additional features such as CCTV cameras, loudspeakers, signage...

SEAFRONT VERSION TO WITHSTAND HARSH COASTAL ENVIRONMENTS

A COMBINATION OF DETECTION DEVICES AND SCENARIOS TO INDIVIDUALLY MANAGE DIFFERENT AREAS: PIR detection for junctions, radar detection if there is a road in the area and camera detection for recreational zones (playground, relaxation area...).

DISTINCT ADAPTIVE LIGHTING AND DIMMING SCENARIOS: higher lighting levels (100%) for a longer period in places where people will spend time.

*See how it works on the official **Schréder Group YouTube Channel**. Type Schréder+adaptive+park*

CREATING IDENTITY, MARKING AND SIGNAGE to enhance places and make them more iconic.

E-BIKE charging stations

WLAN INFRASTRUCTURE can provide internet connections for dedicated services and to the general public.

KEY ELEMENTS

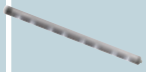
- Multi-functional LED lighting
- Adaptive lighting scenarios (depending on activity in the area)
- Bi-directional communication
- WLAN infrastructure
- CCTV
- Signage
- Loudspeaker
- Identity
- E-bike charging station

WHICH PRODUCT

	U-MOVE	U-SAVE	U-ENJOY	INTEGRATED PIR
MULTI-FUNCTIONAL	V	V	V	SHUFFLE 
Recommended installation height				6.8m max
Lumen package range (luminaire flux)				1,600 to 5,700lm
Dedicated range of poles and brackets				Complete column
FUNCTIONAL LED LIGHTING	V		V	PIANO  / TECEO  / AMPERA 
Recommended installation height				3.5 to 12m / 3.5 to 12m / 3.5 to 12m
Lumen package range (luminaire flux)				2,000 to 19,100lm / 1,000 to 29,300lm / 1,000 to 27,600lm
Dedicated range of poles and brackets				Korda range / Elaya, Thylia and Ito ranges / /
Solar energy compatible				V / V / V
DECORATIVE LED LIGHTING		V	V	PILZEO  / ISLA  / ALURA  / CALLA  / INOA 
Recommended installation height				3.5 to 5m / 3.5 to 5m / 3.5 to 5m / 3.5 to 5m / 3.5 to 4.5m
Lumen package range (luminaire flux)				1,000 to 5,200lm / 1,500 to 4,300lm / 1,300 to 4,200lm / 1,400 to 3,500lm / 1,500 to 6,500lm
Dedicated range of poles and brackets				/ / Descobertas range / Calla range / Inoa range
UNDERPASS LED LIGHTING (external)	V	V	V	OMNIFLOOD  / NEOS 
Recommended installation height				2 to 12m / 3.5 to 10m
Lumen package range (luminaire flux)				2,000 to 23,000lm / 1,800 to 9,900lm
Dedicated range of poles and brackets				/ / Tekton range
MARKER LED LIGHTING (external) ON/OFF	V	V	V	
Recommended installation height				
Lumen package range (luminaire flux)				
Dedicated range of poles and brackets				

LED LIGHTING
LOUDSPEAKER
PIR
CCTV
DIMMING
WLAN
IDENTITY

TO BE COMBINED WITH EXTERNAL PIR (MOOVBOX-P OR SENO)

	 VOLTANA		 AXIA GEN2		 CITEA NG			 OMNISTAR		
	3.5 to 12m		3.5 to 6m		3.5 to 10m			8 to 25m		
	1,000 to 27,600lm		1,000 to 16,000lm		1,800 to 11,400lm			1,700 to 6,700lm		
	/		/		Nun'Alvares range			/		
	✕		✕		✕			✕		
	 HAPILED	 KIO	 YOA	 RIVARA	 BETWEEN			 KAZU		
	3.5 to 5m	3.5 to 5m	3.5 to 10m	3.5 to 6m	1.1 to 5m			3.5 to 5m		
	1,600 to 5,700lm	1,700 to 6,100lm	1,100 to 20,900lm	1,800 to 4,900lm	3,600 to 9,500lm			16,500 to 38,900lm		
	/	/	Lucea, Tressa and Lyre ranges	Rivara range	Complete column			Dedicated range of accessories		
						 BEACONS	 MY LED	 SCULPLINE		
						0.5 to 1.2m	2 to 8m	/		
						12 amber or blue LEDs	2,000 to 12,000lm	400 to 4,900lm		
						/	/	/		
						 SIXTYLINE	 PONTO	 TERRA	 BLOCO	 CITRINE
						± 1m	/	/	/	/
						700 to 2,600lm	marking or 200lm	1.700 to 2,300lm	6 low-power LEDs	TBC
						/	/	/	/	/

HOW YOUR **TAILORED SOLUTION**

OUR EXPERTISE AND OUR PROJECT APPROACH IS YOUR GUARANTEE TO RECEIVE THE BEST SOLUTION FOR YOUR ENVIRONMENT BASED ON AN EFFICIENT COMBINATION OF STANDARD, PERFORMING AND RELIABLE PRODUCTS.

SERVICES
HARDWARE
CONFIGURATION

SERVICES

OUR TEAM OF EXPERTS ANALYSES YOUR ENVIRONMENT, GIVES ADVICE AND CARRIES OUT APPLICATION STUDIES TO DESIGN THE BEST SOLUTION. OUR SIMULATION TOOLS PROVIDE PRECISE INFORMATION ABOUT THE EFFICIENCY, THE COMPLIANCE, THE LAYOUT OF THE INSTALLATION, THE SUSTAINABILITY AND THE TOTAL COST OF OWNERSHIP.

With your consent, we define a plan and manage the entire project with third parties, incorporating the installation, commissioning, testing and validation. Our offer also includes after-sales services, maintenance and optimisation over time.

HARDWARE

We propose state-of-the art LED luminaires, advanced control systems, sensors, robust and aesthetical poles, solar energy systems, integrated CCTV cameras, loudspeakers, WLAN systems and electrical sockets.

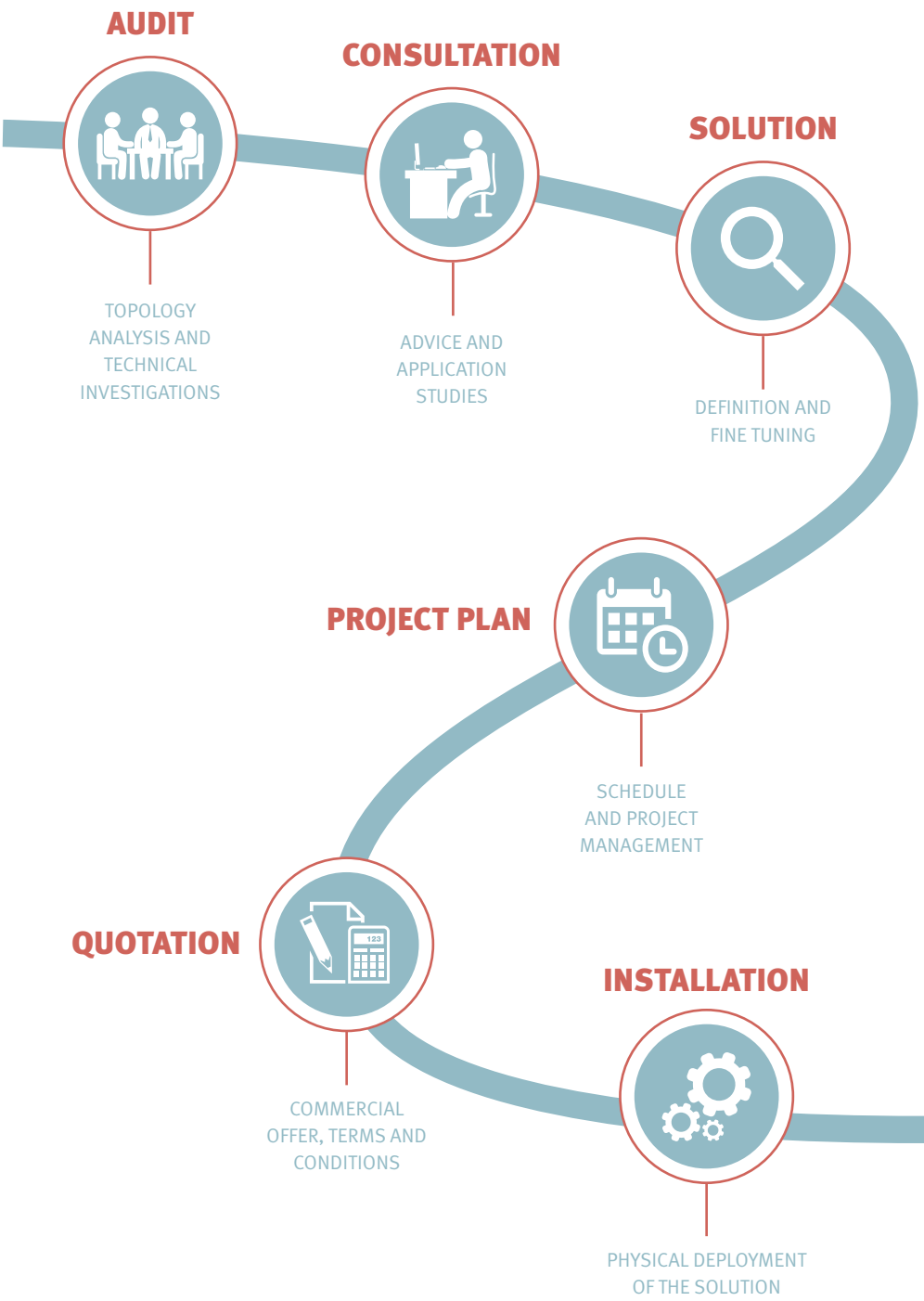
CONFIGURATION

We take on board the factory and on-site configuration of the whole system, including driver programming (dimming profile), lighting network development (Owlet), detection scenario, camera settings, WLAN configuration and sound system set-up.

WHEN

PROJECT SEQUENCE

FROM THE FIRST TOPOLOGY ANALYSIS TO THE HANDOVER AND EVEN THEREAFTER, SCHRÉDER TAKES CHARGE OF THE WHOLE PROJECT MANAGEMENT OF YOUR SCHEME. WE ARE YOUR PARTNER OF CHOICE TO MAKE THE MOST OF YOUR ENVIRONMENT, TODAY AND TOMORROW.



COMMISSIONNING

TECHNICAL DEPLOYMENT OF THE SOLUTION

TRIAL AND VALIDATION

ON-SITE TESTS AND HANDOVER

OPTIMISATION

FINE TUNING OF THE INSTALLATION

MAINTENANCE

KEEPING THE INSTALLATION AT ITS BEST PERFORMANCE

EXTENSION

ADDING NEW FEATURES TO THE INSTALLATION

BAP-SOLUTIONS-EN-2016-05

Schréder

YOUR PARTNER BEYOND LIGHT

www.schreder.com