



**BEK Schröder**  
Experts in lightability™

**YOUR SUSTAINABILITY PARTNER**

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26-10-2021

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CHARLES MDWABA  
GRANT COMBRINK

We want to operate in a sustainable way, with respect for the planet, communities and people



We bring meaningful moments to people by enhancing safety, well-being and **sustainability** in public spaces

**#lightability**

## Overview

- Latest developments regarding our Glassfibre Reinforce Polyester (GRP) Pole Range
- New solar lighting range
- LED optics
- New smart sports lighting control (Schröder ITERRA)
- New lighting management system (Schröder EXEDRA)



## Introduction

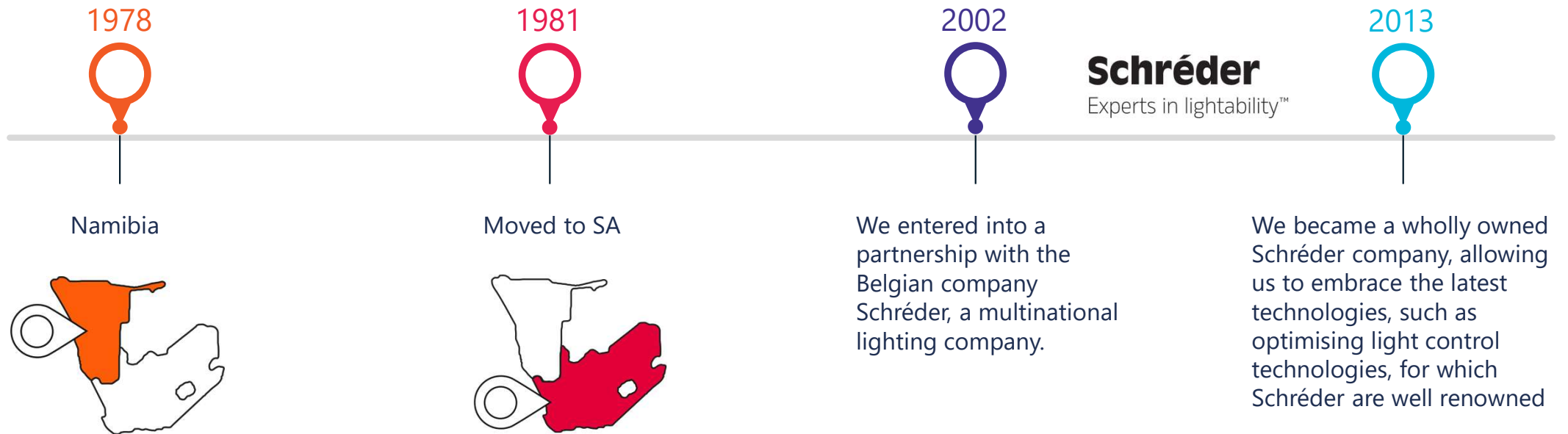
## Market Leaders

Africa's leading manufacturer of Luminaires and  
Glass Fibre Reinforced Polyester (GRP) Poles



## Introduction

# Origin

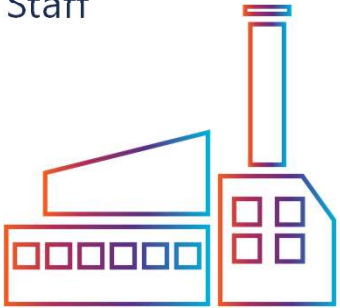


## Introduction

# Local Employment

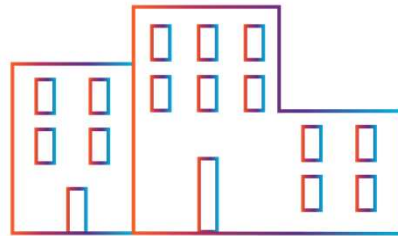
141

Factory  
Staff



140

Admin  
Staff



## B-BBEE Level 4



## Introduction

Providing lighting solutions for safe, comfortable and sustainable environments with local knowledgeable teams with integrated global networks.



### Quality Guaranteed

BEKA Schröder became SA's first lighting company to be awarded ISO 9000 certification. This commitment to quality became the company's hallmark, enabling us to become Africa's largest lighting manufacturer and market leader in exterior lighting.



### Committed to Save Energy

By combining the best of LED technology with a wide range of control systems, our solutions can offer huge energy savings of up to 85% and radically reduce the payback time of a new installation.



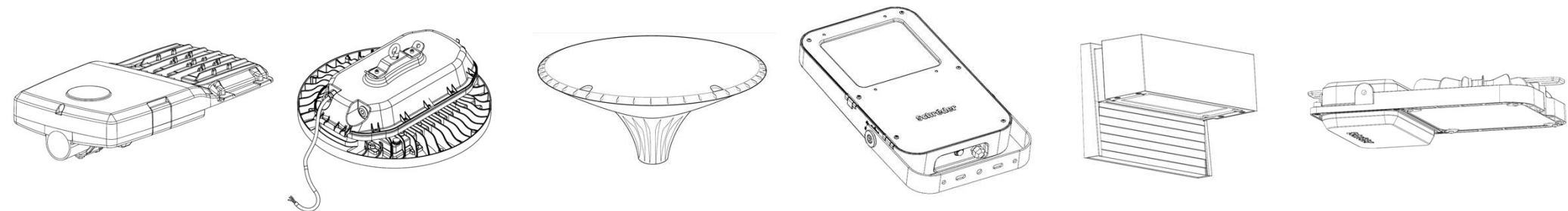
### Inhouse R&D

Our success can be attributed to the research and development of our luminaire and pole ranges, ensuring the appropriate mechanical and thermal product integrity in the environmental conditions of the African continent.

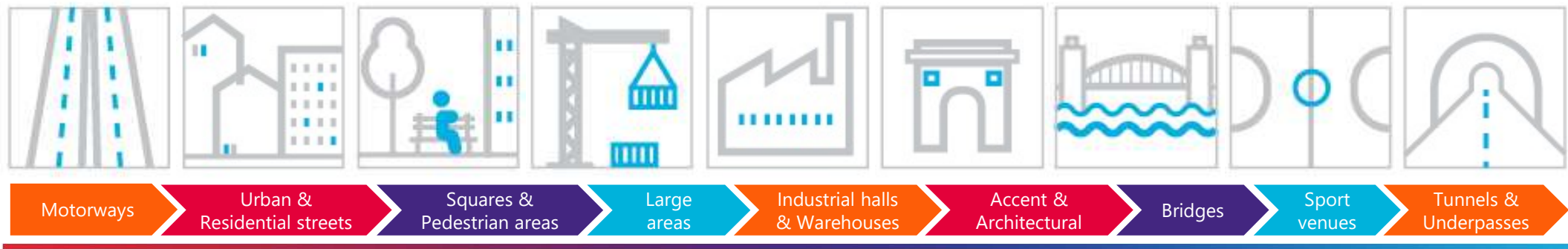
# Introduction

Localized production with innovation and technology driving high quality products across all segments.

## Product Snapshots



## Lighting Solution Offer





"Our market strength means customer orientation. We strive to meet our customer expectations while we have the lighting expertise of over 40 years locally and over 110 years globally. We live a strategic culture of innovation."

**Daniel Kasper**

General Manager at BEKA Schröder

# BEKAPOLE

Glassfibre Reinforced Polyester (GRP) Pole Range




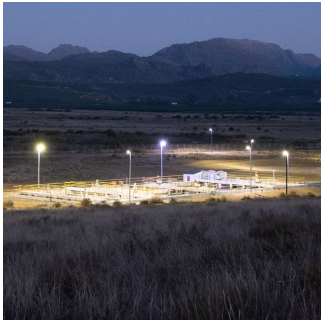




**LOCALLY**  
manufactured



# BEKAPOLE

## Applications

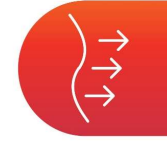
The BEKAPOLE is a GRP Pole range and is used not only for its resistance to corrosion, but is preferred by architects, developers and local authorities for its aesthetic appearance, strength, ease of installation and inherent safety for road users.

PEDESTRIAN AREAS	STREETS		ROADS		
Pedestrian streets, Parks & gardens, Sportsfields	Residential streets, Area lighting, Perimeter security	Decorative lighting, Post top lighting	Rural roads	Motorized traffic, Roads in urban areas	Motorways, Highways, Main roads,
					

## KEY ADVANTAGES



**Light Weight**



**Versatility**



**Vandal Resistant**



**Non-Conductive**



**Non-Corrosive**



**Low Inertia**



**Maintenance-Free**



**High Bending Strength**



**Longevity**



**Sustainable**

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We offer **sustainable** GRP poles which is not only non-corrosive, maintenance free and light weight but strong enough to project your lighting investment...

**BEKA**Schröder

# SOLAR RANGE



**LOCALLY**  
manufactured

## APPLICATIONS



Off-grid Areas



Urban &  
Residential  
Streets



Car Parks



Squares &  
Pedestrian Areas



Bike &  
Pedestrian Paths



Security  
Lighting



Highmast  
Lighting



Service Station



**BEKA Schröder**



# SOLARPOLE

Integrated LED solar lighting solution



**LOCALLY**  
manufactured





**BEKA Schröder**



# BEKA SOLAR

LED solar lighting solution



**LOCALLY**  
manufactured



## BEKA SOLAR



Standard version  
IP 66  
Max. 80W



Median version  
IP 66  
Max. 160W



Post top version  
IP 66  
37W

**BEKA** Schröder



# SOLARFLOOD

LED solar lighting highmast solution



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manufactured



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## SOLARFLOOD


























Single unit  
IP 66  
Max. 80W



Mast layout  
IP 66  
Max. 480W

## Configuration Matrix

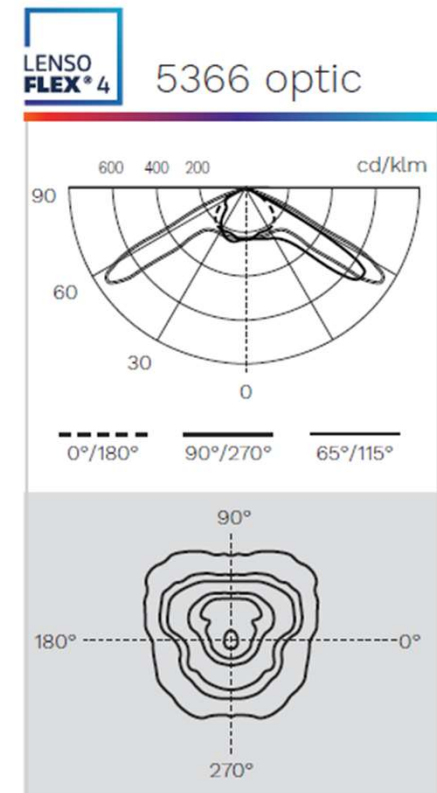
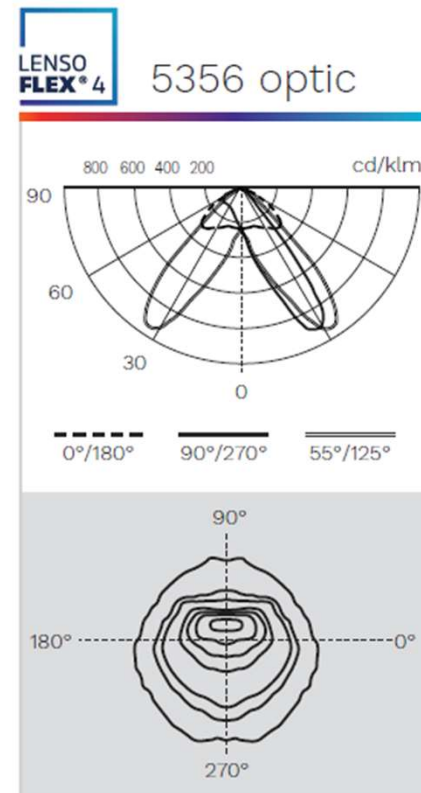
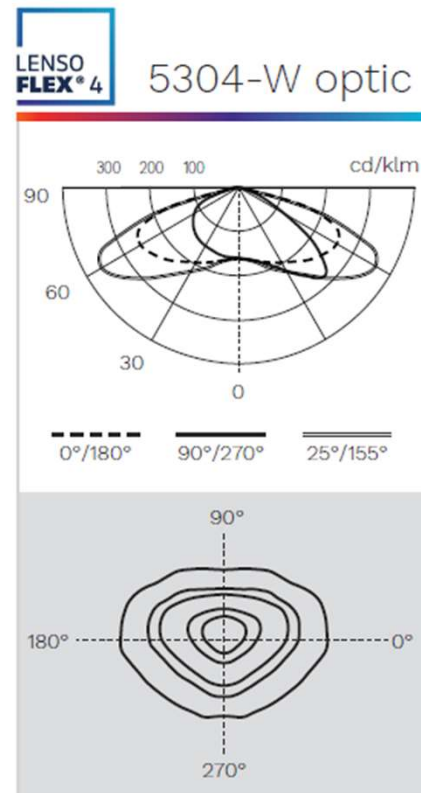
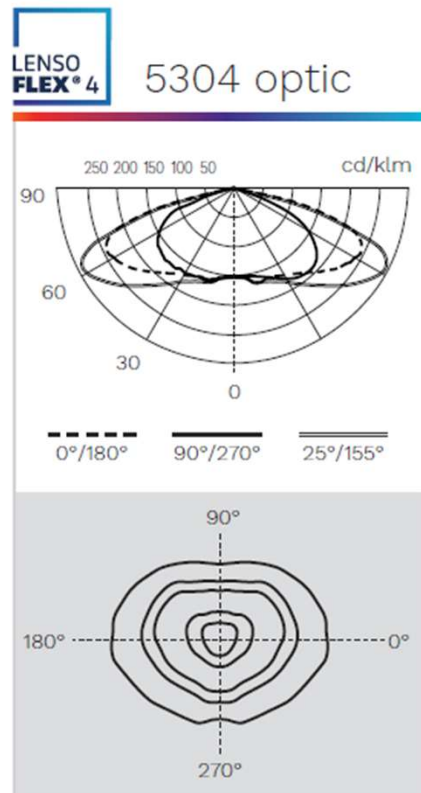
		ZIYA-E 4650lm 30W									ZIYA-1 5340lm 36W								ZIYA-1 8060lm 53W						
Solar module rated at 25°C		160W									160W				260W				260W						
Optidim		4				100% light output					2				100% light output				100% light output		5			2	
Battery technologies																									
Autonomy days		6	4	6	4	3	5	3	3	2	4	4	3	2	4	3	2	2	2	2	3	2	2	3	
Geographical location																									
Angola	Huambo	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Luanda	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Botswana	Gaborone	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Shakawe	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
DRC	Lumbumbashi	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Kinshasa	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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Kenya	Nairobi	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Malawi	Lilongwe	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mauritius	Agalea	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mozambique	Pemba	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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Namibia	Windhoek	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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Nigeria	Kaduna	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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Senegal	Dakar	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
South Africa	Cape Town	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Durban	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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	Kuruman	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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	Thabazimbi	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tanzania	Dar Es Salaam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Zambia	Lusaka	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	



We offer off grid **sustainable,**  
functional & aesthetic solutions for  
various applications, with integrated  
and non-integrated solar components

# LATEST LED OPTICS

# LIGHT DISTRIBUTIONS



## LENsofarflex® 4

LensoFlex® 4 maximises the heritage of the LensoFlex® concept with a very compact yet powerful photometric engine based upon the addition principle of photometric distribution.

The number of LEDs in combination with the driving current determines the intensity level of the light distribution.

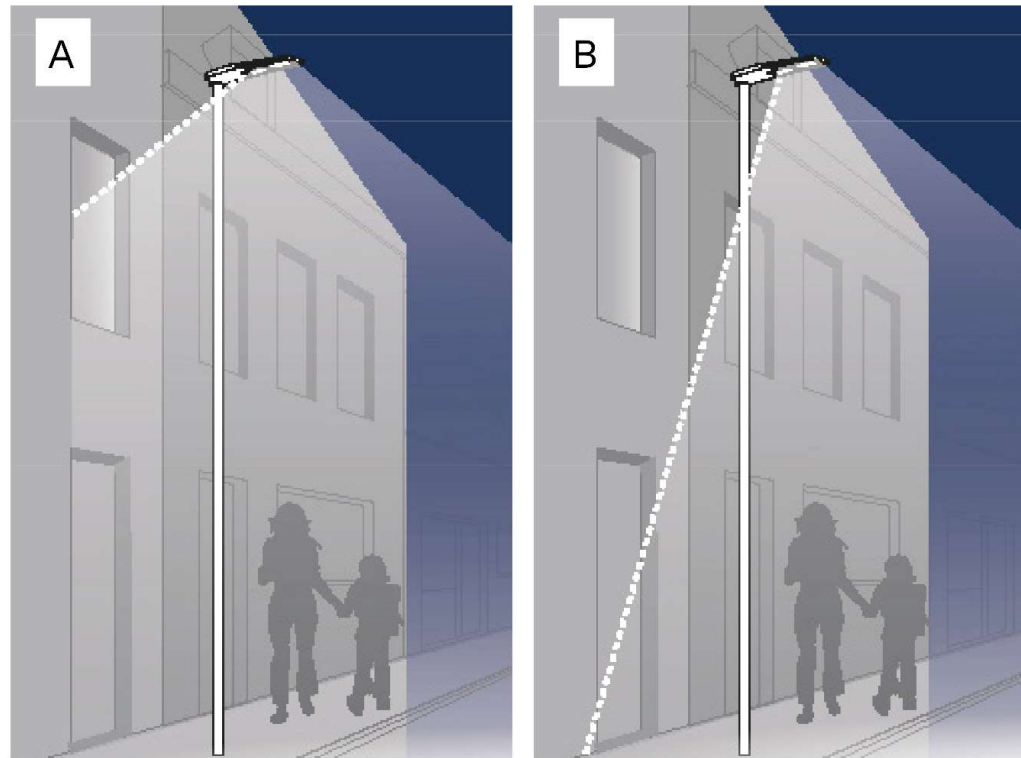
With optimised light distributions and very high efficiency, this fourth generation enables the products to be downsized to meet application requirements with an optimised solution in terms of investment.



## LENsoFLEX® 4

Back Light control (optional)

The LensoFlex® 4 modules can be equipped with a Back Light control louvre. This additional feature minimizes spill light towards the back of the luminaire to avoid intrusive light towards surrounding buildings.



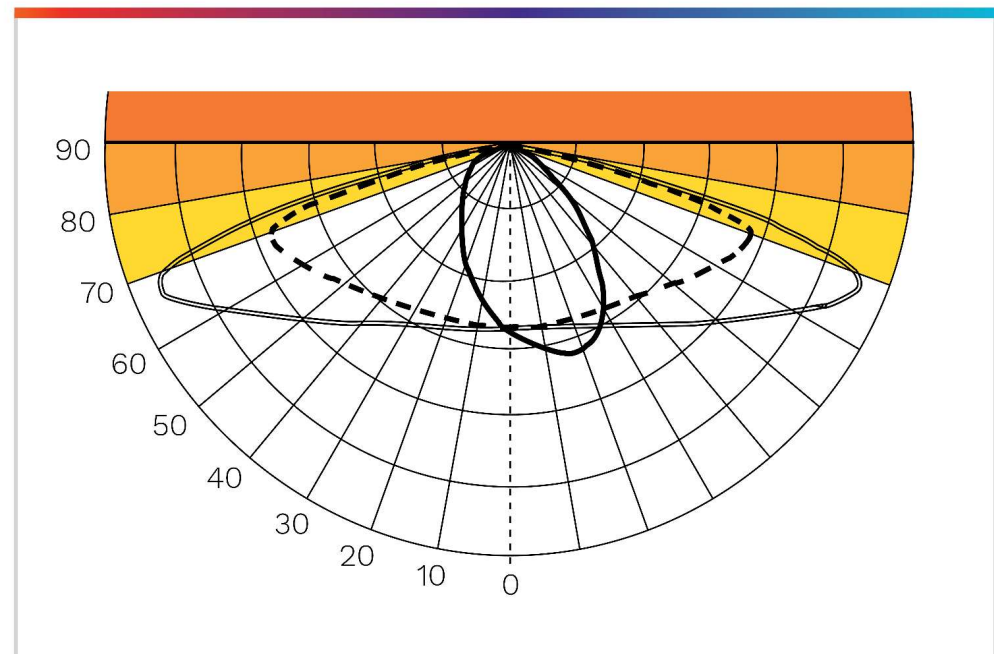
A. Without Back Light control | B. With Back Light control

## LENSOFLEX® 4

Anti-glare louvre (optional)

For high visual comfort, the anti-glare louvre enables a significant glare reduction in case of low glare requirements.

It is designed to cut the light at high angles to still provide very efficient lighting while maintaining exceptional visual comfort.



Anti-glare louvre cuts off light above 70°

We offer a **sustainable** optical system with a powerful photometric engine with optimal photometric distribution that gives you light control, distribution and the reduction of light pollution...

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# Schröder TERRA

Smart sports lighting control solution





## WHY INTEGRATING A CONTROL SYSTEM IS IMPORTANT?



To get the right light, where, when and how it is needed



To ease the lighting control and its configuration



To reduce cost, energy consumption, and risk by controlling lighting assets



To reduce environmental impact and generate carbon savings



To avoid rewiring of DALI cable in the case of a retrofit project (wireless feature)





## APPLICATIONS

Football  
Rugby / Hockey  
Baseball



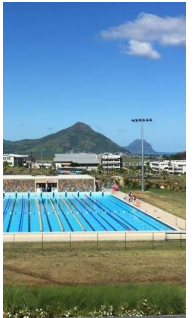
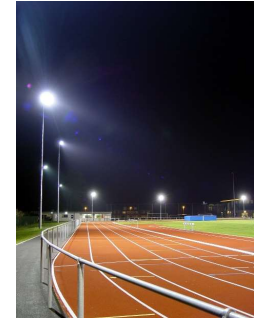
Tennis  
Padel



Multisports  
Playgrounds



Other outdoor  
recreational sports  
facilities



## LUMINAIRE COMPATIBILITY

All DALI2 luminaires

OMNIBLAST-E



LEDFLOOD



OMNIFLOOD



LEDNOVA



LEDLUME



LEDLUME XP



KAZELLE



LEDBAY



## WHAT IF I HAVE MORE THAN 100M?

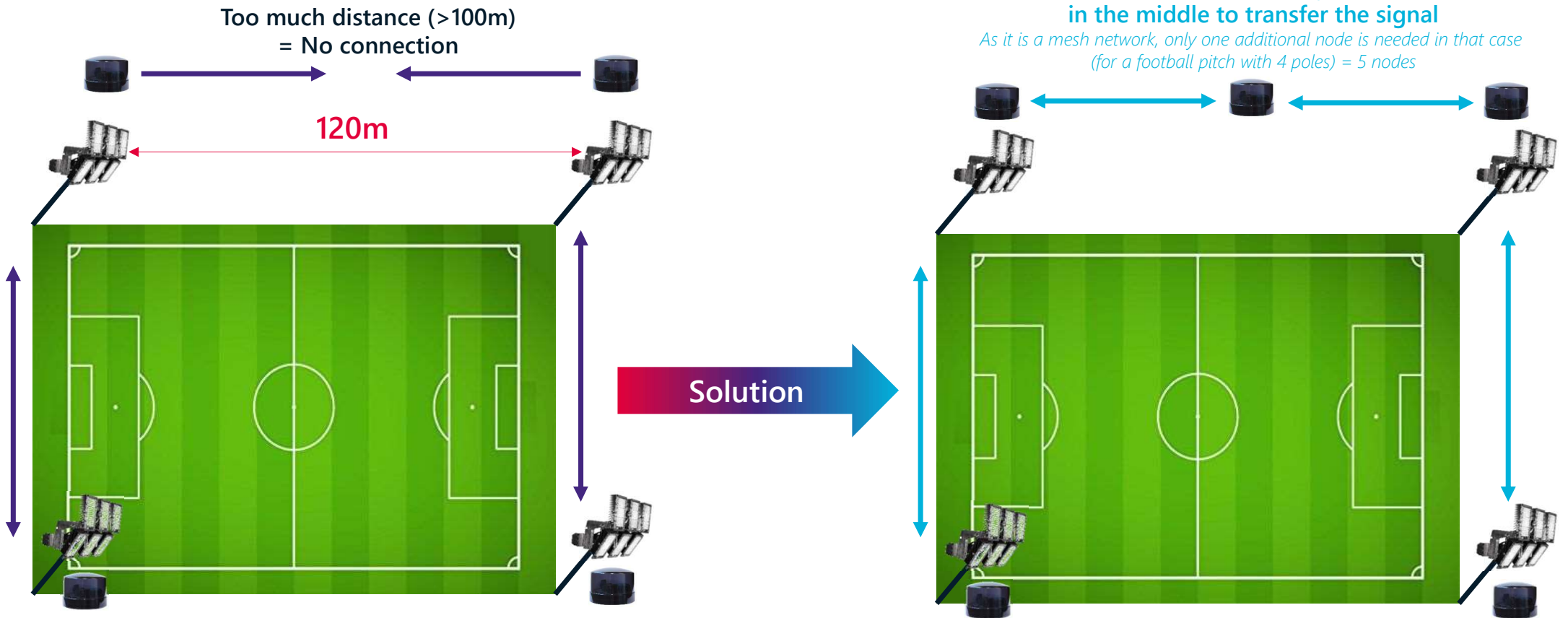
Too much distance (>100m)  
= No connection

120m

Solution

Add a node (without any luminaire)  
in the middle to transfer the signal

*As it is a mesh network, only one additional node is needed in that case  
(for a football pitch with 4 poles) = 5 nodes*



# CAPABILITIES



## USP



QUICK & EASY  
IMPLEMENTATION



OPEN TECHNOLOGIES &  
STANDARDS



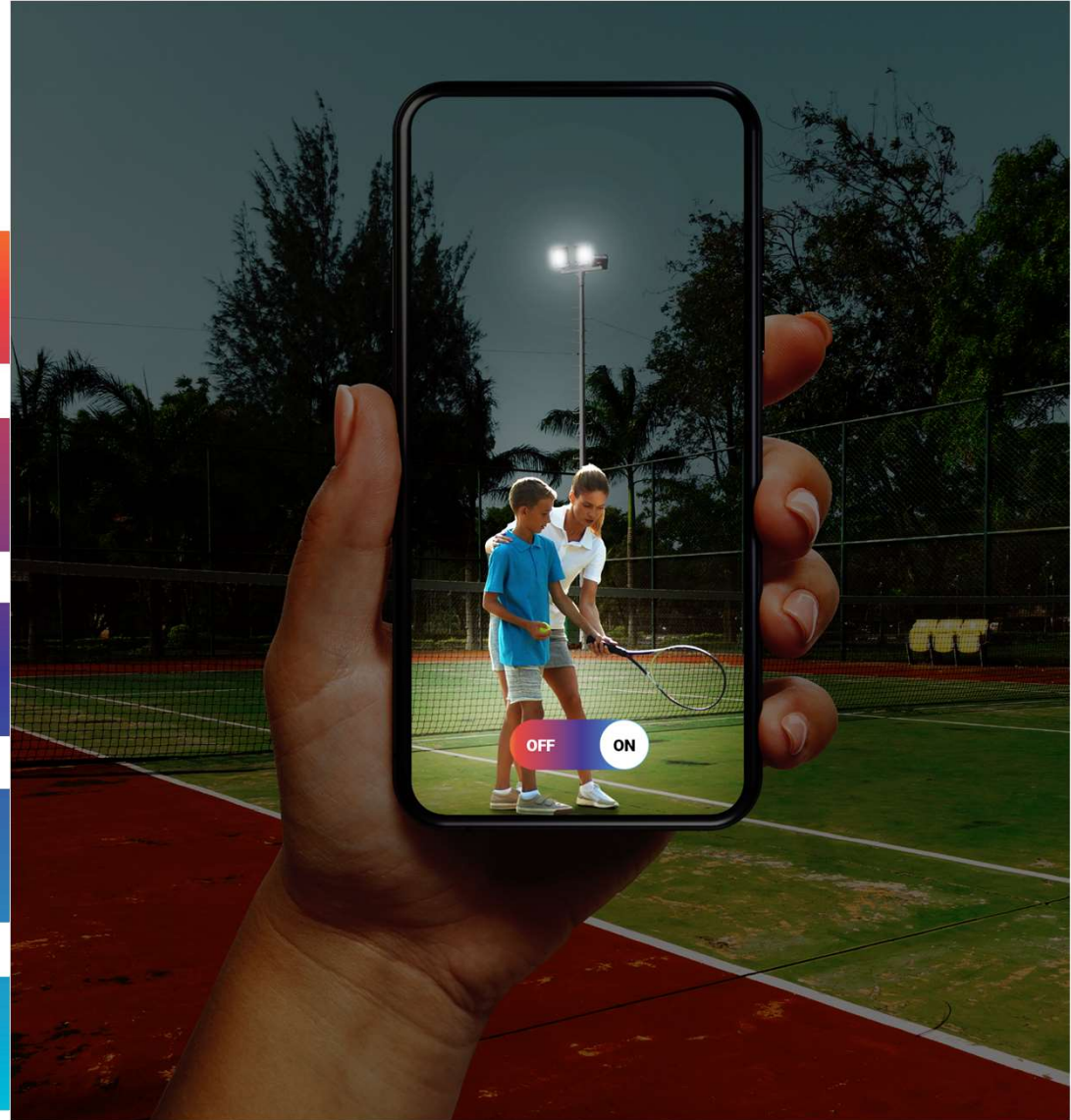
OUTSTANDING USER  
EXPERIENCE



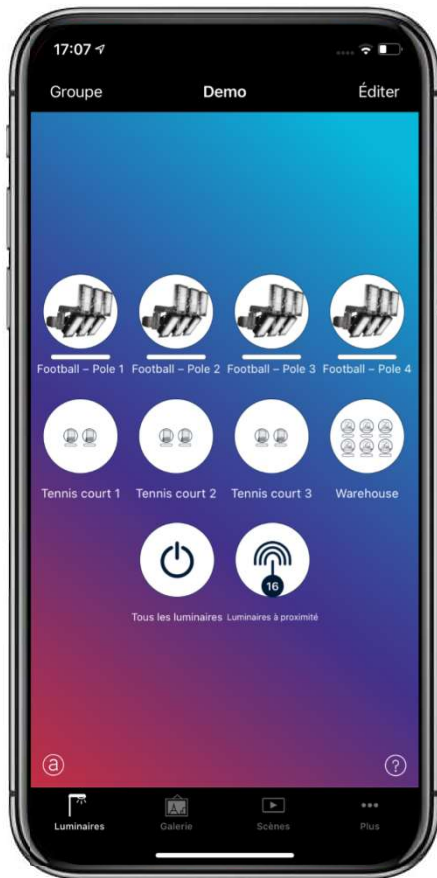
FUTUREPROOF



COST EFFECTIVE



## LUMINAIRES TAB



Local control  
via Bluetooth

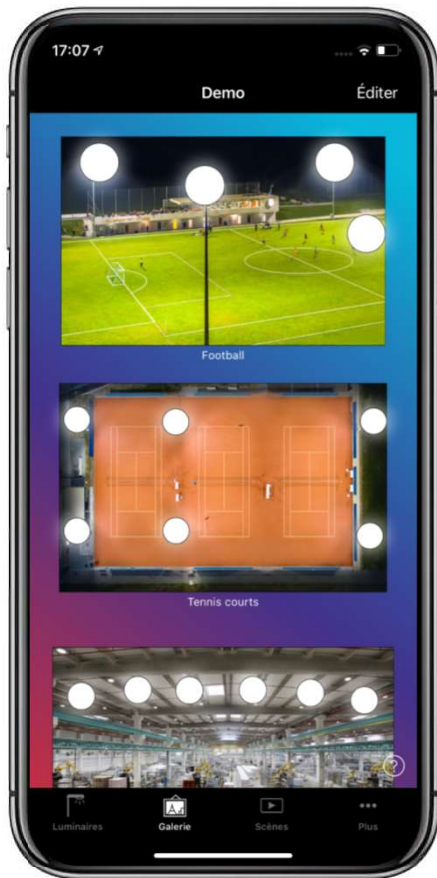
See and control all your luminaires

Create groups based on your needs

Turn on/off all your luminaire with one tap

Dim your luminaires & groups by sliding

## GALLERY TAB



Local control  
via Bluetooth

Most natural way of controlling your luminaires

Upload or take pictures from your device

Define luminaires place on the pictures

Control & dim directly from the picture

## SCENES TAB



Local control  
via Bluetooth

Create scenes for different occasions

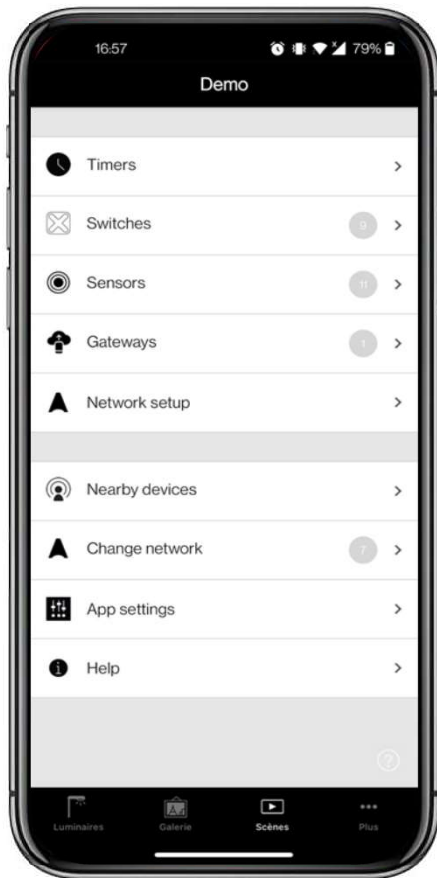
Perfect to pre-set match, training, maintenance  
lighting

Create lighting animations and loops

Control & dim directly the scenes & animation

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## MORE TAB



Local control  
via Bluetooth

Schedule your lighting based on time

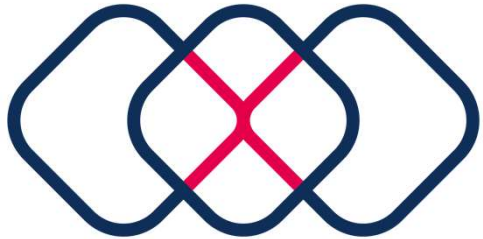
Configure your ITERRA press

Organize your network and settings

Modify the application settings

We offer **sustainable** wireless control system to reduce cost, energy consumption and controlling your lighting assets to your needs...

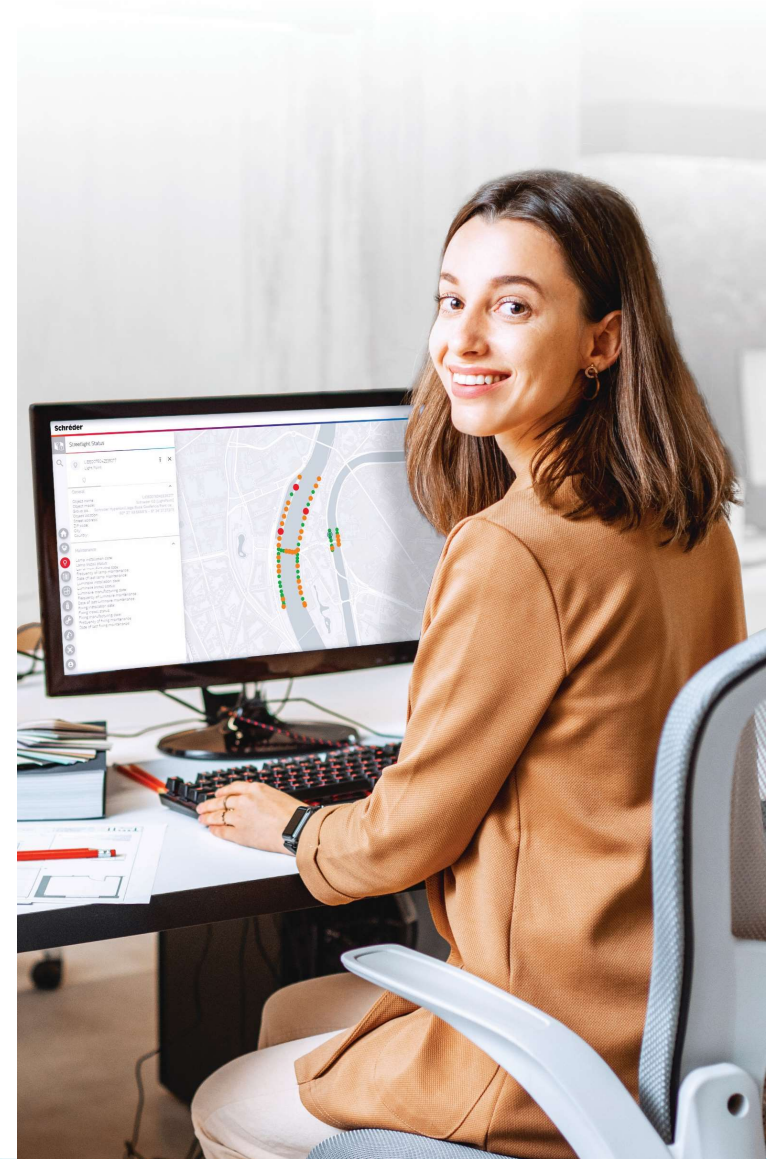
**BEKA**Schröder



EXEDRA

# Schröder EXEDRA

The ultimate smart lighting City  
Management System (CMS)





# Schröder EXEDRA

Understanding the platform



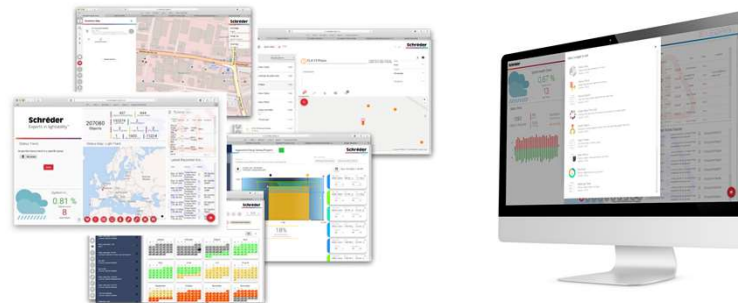
DATA MANAGEMENT

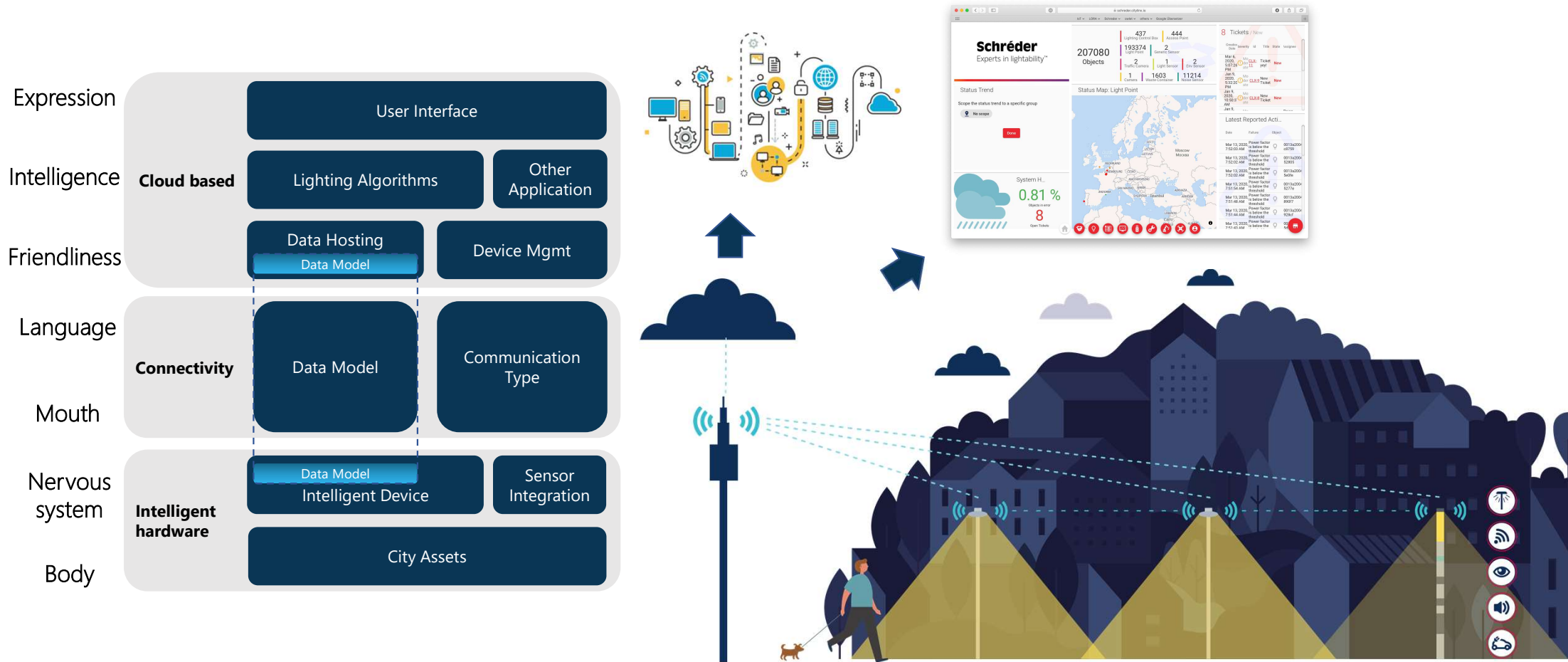


GATEWAYS



USER INTERFACE





# City-wide connectivity

Communication and interconnection



# The main challenge for smarter cities

Today, 82% of smart city initiatives fail due to a lack of maturity and openness

## Cities, utilities and system integrators:

- Have **no control** on the data generated by sensors and are **dependant** on solution provider
- **Spend money** and effort on integrating APIs and trying to understand proprietary data formats
- **Decide not to deploy** rather than commit public money to single-source supplier systems



*The Smart Streetlight market could grow 42% per year reaching 70 millions end-devices from 5 millions today, if manufacturers would agree on interoperable products !*

*Juniper Research – May 2019*

# Technology to enable a smart city journey

Breaking the silos: all layers remain open and futureproof



# All for your convenience

Quick and easy deployment

## A plug-and-play solution

An **intelligent automated commissioning process** recognises, verifies and retrieves the luminaire device data into the User Interface.

### Auto-detection

All asset data is automatically brought into the system via an RFID tag.

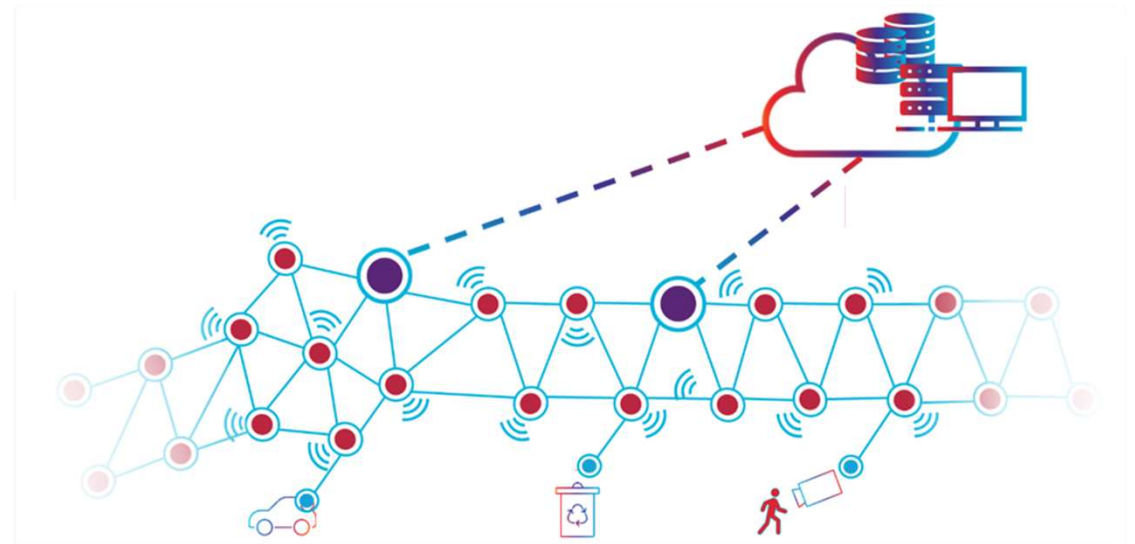
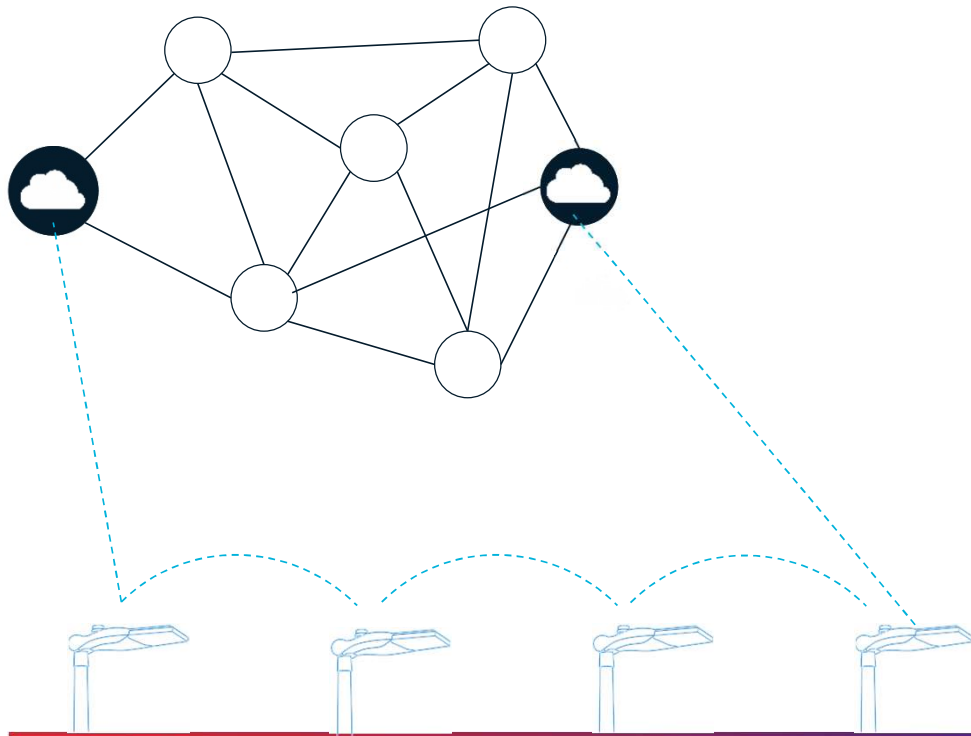
### Geolocation

The precise positioning of the node is automatically imported to the User Interface.



# All for your convenience

A self-healing network



## Integrated dynamic lighting

The mesh network enables **sensors to be linked to groups of luminaires** in order to create high-added value light-on-demand scenarios.

# Take the asset management to the next level

User-friendly and feature complete User Interface (UI)



Fully configurable dashboard



Energy consumption management



Integrated inventory and device management



Ticketing system



Device status and real-time insight/control



Automation



Lighting schedules



User Management



Dynamic lighting



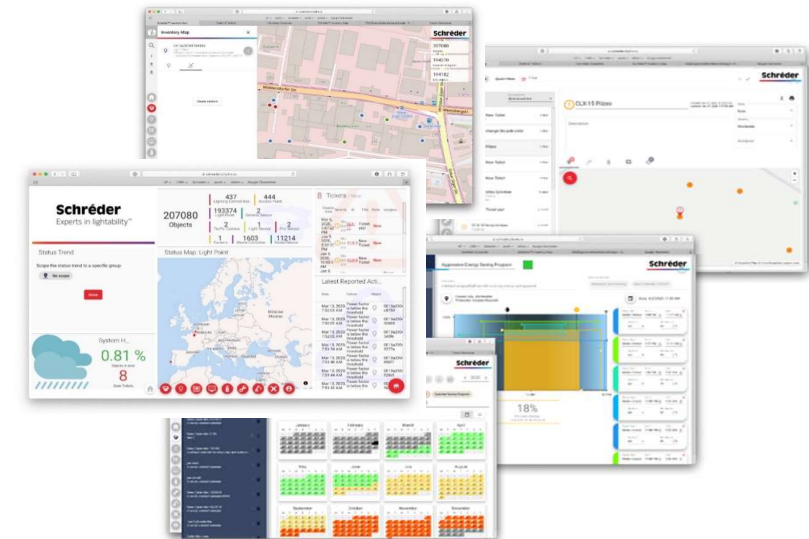
Multi-tenant



Reports, alarms and data analytics



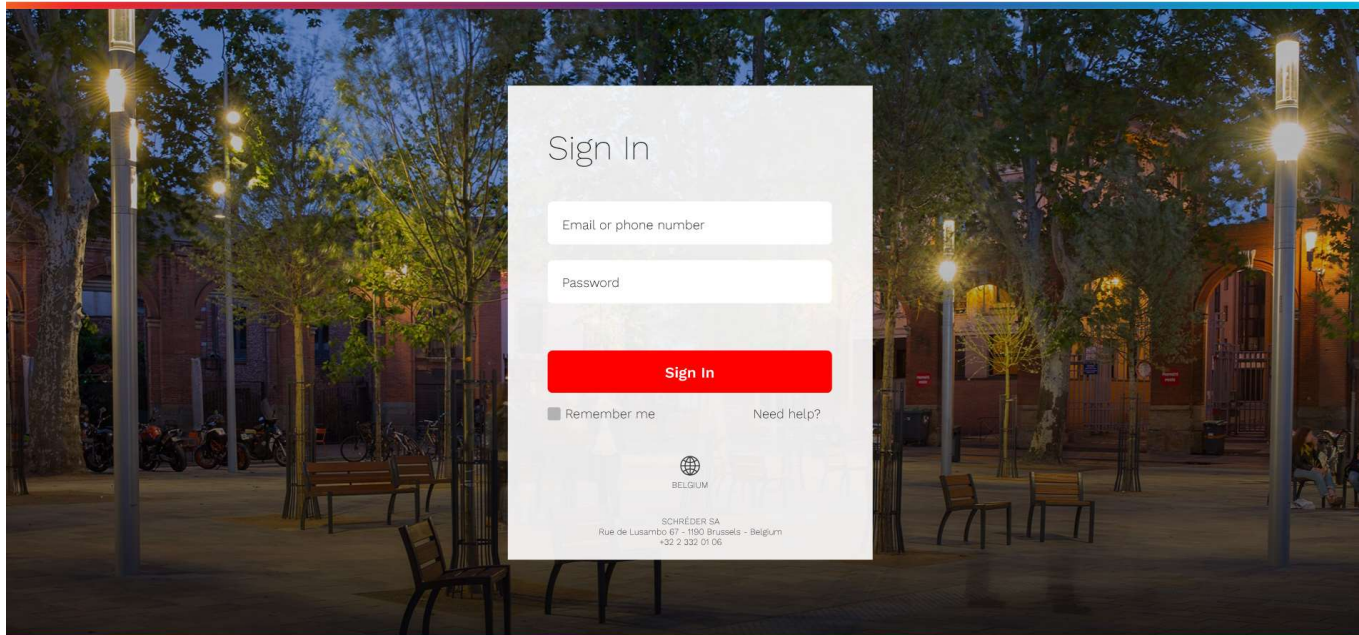
Application solution



# Providing end-to-end security

From the controller to the user

**Schröder**  
Experts in lightability™



© Schröder 2020



## Secure Login

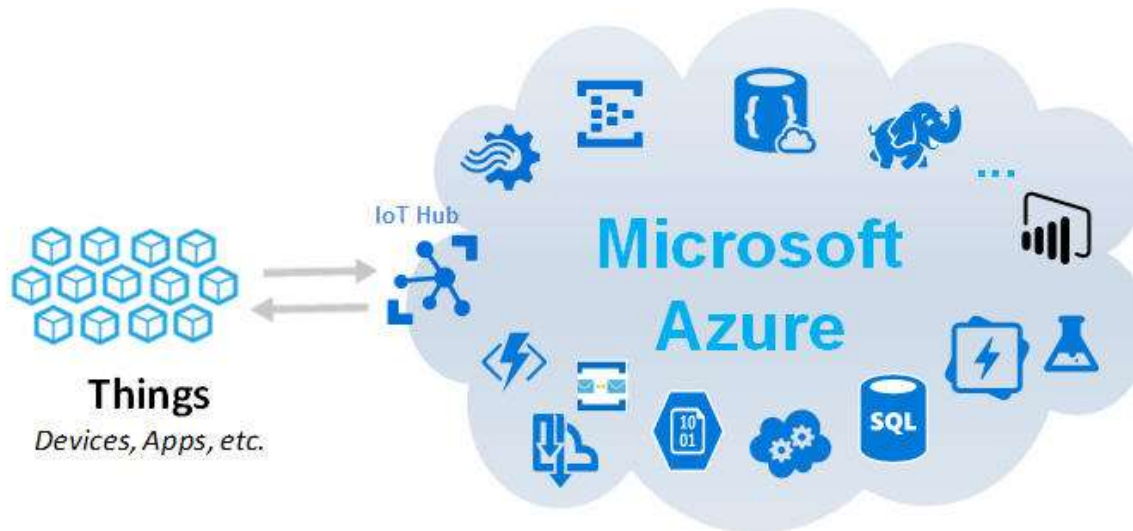
- Compatible active directory
- Two-step authentication

## User Access Rights based on:

- Geographical areas
- Type of objects
- Features

# Security, reliability and scalability

Data processed and managed with a leading company in cloud computing

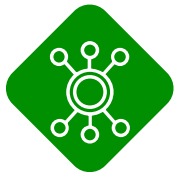


- Scalable
- Ruggedized
- Secure
- Adaptable

Building, testing, deploying, and managing applications and services through Microsoft-managed data centers.

# A 5-star solution

Unique combination of advanced technology and customer-friendly features



## OPEN

- NEMA & ZHAGA
- UCIFI DATA MODEL
- LWM2M STANDARD
- OPEN DATA MODEL
- 3<sup>RD</sup> PARTY DEVICES
- TALQ2 COMPATIBLE



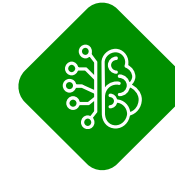
## FEATURES

- MULTI-DALI
- LAST GASP MESSAGE
- DYNAMIC LIGHTING
- SENSORS



## EASY

- GATEWAYLESS
- AUTO-COMMISSIONING
- AUTO-INVENTORY



## DATA

- ASSET MANAGEMENT
- DATA ANALYSIS
- REPORTS
- ALARMS
- AUTOMATION



## SECURITY

- OTA FIRMWARE UPDATE
- END-TO-END SECURITY
- MICROSOFT CLOUD

We offer a **sustainable** smart lighting city management system to reduce cost, energy consumption, with full control over your lighting assets

We bring meaningful moments to people by  
enhancing safety, well-being and  
**sustainability** in public spaces

This is only part of our Sustainability  
offer we pass on to you...



THANK YOU