### **Schréder** Experts in lightability™

# **TECEO UPLINK**





The emergence of smart lighting technologies has redefined our approach to public lighting and led to the development of lighting solutions that contribute to better management of energy and natural resources.

In keeping with our commitment to a more sustainable future, we have developed TECEO UPLINK, a connectivity retrofit kit enabling seamless integration of connected lighting technologies into the first generation of TECEO 1 luminaires. This technology enables you to easily connect your legacy TECEO 1, extending the lifetime of your existing luminaires while significantly reducing operating costs. Unlock the benefits of the latest connected lighting technologies without investing in a whole new luminaire, and replace only the components you need.

The TECEO UPLINK connectivity kit prolongs longevity and improves the efficiency of your legacy TECEO 1 lighting installation, while taking you on a journey towards a greener future.



RESIDENTIAL

STREETS



BRIDGES









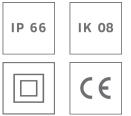
SOUARES & PEDESTRIAN AREAS

MOTORWAYS













### TECEO UPLINK | SUMMARY

### Schréder

#### Concept

TECEO UPLINK enables you to retrofit first-generation TECEO 1 luminaires and transform your existing lighting installation into a connected-ready lighting system.

This connectivity retrofit kit consists of a TECEO 1 cover, delivered with a NEMA or a Zhaga socket, and the associated gear tray equipped with all electronic components. This design allows only the necessary components to be replaced, eliminating the need to invest in a new luminaire and generate excessive waste, as well as avoiding costly replacements.

Harness the benefits of connected lighting technologies and instantly transform your legacy street lighting into a more circular and sustainable installation. Remotely control and adjust your lighting levels at any time and considerably reduce your energy consumption thanks to TECEO UPLINK. This technology not only helps you generate significant cost and energy savings, but also extends the lifetime of the luminaires.

This user-friendly retrofit kit provides all the necessary components. The gear tray is delivered with a driver as well as all the required wiring and connectors. Additional surge protection devices, fuses or other electrical components can be delivered as an option. TECEO UPLINK is equipped with error-proof (poke-yoke) connectors and requires minimal tooling, allowing easy installation.

TECEO UPLINK is compatible with first-generation TECEO 1 luminaires, from 8 to 48 LED configurations.



TECEO UPLINK extends the lifetime of your existing TECEO 1 luminaire and reduces operating costs.



Available with a NEMA or a Zhaga socket for various connectivity options.

#### TYPES OF APPLICATION

- URBAN & RESIDENTIAL STREETS
- BRIDGES
- RAILWAY STATIONS & METROS
- CAR PARKS
- SQUARES & PEDESTRIAN AREAS
- ROADS & MOTORWAYS

#### **KEY ADVANTAGES**

- Compatible with the Schréder EXEDRA control platform
- Optimised for energy savings and remote management
- Sustainable and circular: replace only the components you need and avoid unnecessary waste
- Connectivity kit compatible with a NEMA or a Zhaga socket to integrate with various connected lighting systems
- Error-proof wiring with poke-yoke connectors



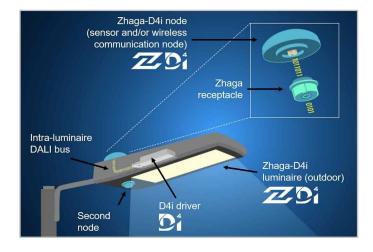
Provides compatibility with the Schréder EXEDRA lighting control system.



Poke-yoke connectors for easy, failure-proof integration into your TECEO 1 luminaires.

## TECEO UPLINK | Zhaga-D4i

The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.



## Standardisation for interoperable ecosystems



As a founding member of the Zhaga consortium, Schréder has participated in the creation of, and therefore supports, the Zhaga-D4i certification program and the initiative of this group to standardise an interoperable ecosystem. The D4i specifications take the best of the standard DALI2 protocol and adapt it to an intra-luminaire environment but it has certain limitations. Only luminaire mounted control devices can be combined with a Zhaga-D4i luminaire.

According to the specification, control devices are limited respectively to 2W and 1W average power consumption.

### Certification program

The Zhaga-D4i certification covers all the critical features including mechanical fit, digital communication, data reporting and power requirements within a single luminaire, ensuring plug-and-play interoperability of luminaires (drivers) and peripherals such as connectivity nodes.

### Cost-effective solution

A Zhaga-D4i certified luminaire includes drivers offering features that had previously been in the control node, like energy metering, which has in turn simplified the control device therefore reducing the price of the control system.

### TECEO UPLINK | Schréder EXEDRA



## Schréder

Schréder EXEDRA is the most advanced lighting management system on the market for controlling, monitoring and analysing streetlights in a userfriendly way.



## Standardisation for interoperable ecosystems

Schréder plays a key role in driving standardisation with alliances and partners such as uCIFI, TALQ or Zhaga. Our joint commitment is to provide solutions designed for vertical and horizontal IoT integration. From the body (hardware) to the language (data model) and the intelligence (algorithms), the complete Schréder EXEDRA system relies on shared and open technologies. Schréder EXEDRA also relies on Microsoft Azure for cloud services, provided with the highest levels of trust, transparency, standards conformance and regulatory compliance.

### Breaking the silos

With EXEDRA, Schréder has taken a technology-agnostic approach: we rely on open standards and protocols to design an architecture able to interact seamlessly with third-party software and hardware solutions. Schréder EXEDRA is designed to unlock complete interoperability, as it offers the ability to:

- control devices (luminaires) from other brands
- manage controllers and to integrate sensors from other brands
- connect with third-party devices and platforms

### A plug-and-play solution

As a gateway-less system using the cellular network, an intelligent automated commissioning process recognises, verifies and retrieves luminaire data into the user interface. The self-healing mesh between luminaire controllers enables real-time adaptive lighting to be configured directly via the user interface. OWLET IV luminaire controllers, optimised for Schréder EXEDRA, operate Schréder's luminaires and luminaires from third parties. They use both cellular and mesh radio networks, optimising geographical coverage and redundancy for continuous operation.

#### Tailored experience



Schréder EXEDRA includes all advanced features needed for smart device management, real-time and scheduled control, dynamic and automated lighting scenarios, maintenance and field operation planning, energy consumption management and third-party connected hardware integration. It is fully configurable and includes tools for user management and multi-tenant policy that enables contractors, utilities or big cities to segregate projects.

## A powerful tool for efficiency, rationalisation and decision making

Data is gold. Schréder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.

#### Protected on every side



Schréder EXEDRA provides state-of-theart data security with encryption, hashing, tokenisation, and key management practices that protect data across the whole system and its associated services. The whole platform is ISO 27001 certified. It demonstrates that Schréder EXEDRA meets the requirements for establishing, implementing, maintaining and continually improving security management.

#### Mobile App: any time, any place, connect to your street lighting



The Schréder EXEDRA mobile application offers the essential functionalities of the desktop platform, to accompany all types of operator on site in their daily effort to maximise the potential of connected lighting. It enables real-time control and settings, and contributes to effective maintenance.

### TECEO UPLINK | CHARACTERISTICS

### Schréder

#### GENERAL INFORMATION

CE mark	Yes
ROHS compliant	Yes
Zhaga-D4i certified	Yes
Testing standard	EN 60598-1 EN 60598-2-3

#### HOUSING AND FINISH

Housing	Aluminium
Housing finish	Polyester powder coating
Standard colour(s)	AKZO grey 900 sanded
Tightness level	IP 66
Impact resistance	IK 08
Access for maintenance	Direct access to the gear compartment by loosening screws on the top cover

#### **OPERATING CONDITIONS**

Operating	-40°C up to +45°C / -40° F up to 113°F
temperature range	
(Ta)	

 $\cdot$  Depending on the luminaire configuration. For more details, please contact us.

#### ELECTRICAL INFORMATION

Electrical class	Class I EU, Class II EU
Nominal voltage	220-240V – 50-60Hz
Surge protection options (kV)	10
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-3-3 / EN 61547
Control options	Remote management
Socket	Zhaga (optional) NEMA 7-pin (optional)
Associated control system(s)	Schréder EXEDRA

### TECEO UPLINK | CHARACTERISTICS

### Schréder

#### DIMENSIONS AND MOUNTING

AxBxC (mm   inch)	607x113x318   23.9x4.4x12.5
Weight (kg   lbs)	9.6   21.1
Aerodynamic resistance (CxS)	0.06
Mounting possibilities	Retrofit kit

 $\cdot$  For more information about mounting possibilities, please consult the installation sheet.

· Dimensions and weight are given for the complete luminaire when equipped with TECEO 1 UPLINK.

