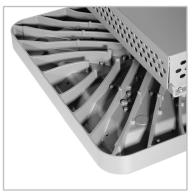
# **OMNISTAR KIT**















### The complete, powerful lighting solution, dedicated to industrial and large area applications

OMNISTAR KIT is a combination of the powerful OMNISTAR optical unit and the innovative gear box - the OMNIBOX. Available in three versions, these luminaires offer a modular and powerful LED lighting solution for applications such as warehouses, high bays, tunnels, sports arenas, airports, car parks and large areas.

These luminaires have been designed to provide unrivalled photometric performance for lighting areas where high lumen packages are needed, while benefiting from all the advantages of an economical LED solution: reduced energy consumption, limited maintenance and fast return on

The mounting options of the OMNISTAR KIT luminaires allow fast and easy installation on different types of support - wall, ceilings, poles and high masts - making it a flexible lighting solution suitable for various types of high-power lighting application.



**IP 66** 











**UL 1598** CSA C22.2 No. 250.0



















### **OMNISTAR KIT | SUMMARY**

### Schréder

#### Concept

OMNISTAR KIT luminaires come as a pre-assembled ensemble, including the optical unit and attached gear box. OMNISTAR KIT is available in three versions: KIT STD, KIT PRO and KIT ECO. The KIT STD has its gear box fixed on the optical unit and is suitable for a 1.5G vibration load, while the KIT PRO, with its gear box fixed on its robust bracket, allows for a 3G vibration load. The OMNISTAR KIT PRO is available in an explosion-proof version to meet specific industrial requirements. The OMNISTAR KIT ECO offers a compact and economical version for the fastest return on investment with no compromise on performance.

The luminaires are fully assembled and ready for installation. As an option, connection can be made using quick connectors to speed up installation. Access to the gear box is toolless, using a latch, to ease any maintenance activities. A non-toolless version, with a security screw, can be supplied on request.

OMNISTAR KIT is available with various mounting options to suit any kind of lighting project: wall bracket, ceiling bracket, and post-top adaptor for pole mounting and high masts. The inclination angle can be easily adjusted on site to improve the light distribution.

OMNISTAR KIT combines the energy efficiency of LED technology with the performance of the LensoFlex and BlastFlex hotometric concepts developed by Schréder. The design of the LensoFlex photometric engine and the flexibility of its lighting distribution ensure safe and pleasant conditions for users while offering superior efficiency.

OMNISTAR KIT can also be fitted with collimator optics to provide a counterbeam lighting solution for sports, tunnel and apron applications.

These luminaires are available with various control options to efficiently manage lighting installations and generate significant savings.



- BRIDGES
- TUNNELS & UNDERPASSES
- CAR PARKS
- LARGE AREAS
- INDUSTRIAL HALLS & WAREHOUSES
- ROADS & MOTORWAYS
- SPORT FACILITIES

#### KEY ADVANTAGES

- Flexibility: modular approach for highpower applications
- Various mounting options and inclination possibilities on-site for optimal photometry
- Explosion proof variant for use in industrial environments with a hazardous atmosphere
- Various control options including remote management systems
- Cost-effective and efficient to maximise energy and maintenance savings
- Real beneficial LED alternative to HID floodlights for high-power applications



A pre-assembled lighting solution ready for installation and connection.



As an option, OMNISTAR KIT STD and PRO gear boxes can be delivered with quick connectors for fast and easy installation.



The inclination angle can be easily adjusted on site to improve the lighting distribution.



The OMNISTAR KIT lighting solutions deliver high lumen packages for a large range of high-power applications.

### OMNISTAR KIT | OMNISTAR KIT STD



### OMNISTAR KIT | OMNISTAR KIT ECO



OMNISTAR KIT | OMNISTAR KIT PRO



### OMNISTAR KIT | PHOTOMETRY

### Schréder



#### Control light spill

As an option, the luminaire can be equipped with louvres to minimise light spill and prevent intrusive lighting. They can be fitted inside or outside the optical unit, depending on the desired direction of the light distribution.





A. Without louvres B. With louvres



#### LensoFlex®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 optics can feature backlight control to prevent intrusive lighting, or a glare limiter for high visual comfort.





#### ReFlexo™

Using metal reflectors with a superior reflective co-efficient, the  $ReFlexo^{TM}$  photometric engine delivers high performance for specific applications such as counter beam lighting in tunnels or very extensive light distributions for sports or apron lighting.

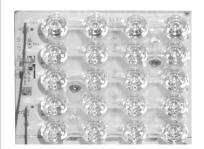
Another key advantage of the ReFlexo $^{\text{TM}}$  is its' ability to direct all the light to the front of the luminaire, ensuring that no back light is emitted. This photometric engine guarantees glare free lighting for excellent visual comfort and the creation of ambiance.





#### BlastFlex<sup>™</sup>4

Using collimators made of high-transmission PMMA, the BlastFlex<sup>TM</sup>4 photometric engine offers the highest efficiency for directional beams dedicated to specific applications in architectural and sports lighting. The ability to control the light with the highest accuracy reduces light spill in the surroundings, improves uniformity on the area to be lit and contributes to optimal use of the energy consumed.



### OMNISTAR KIT | CONTROL SYSTEMS

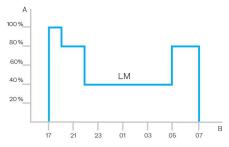
### Schréder



#### Custom dimming profile

Intelligent luminaire drivers can be programmed with complex dimming profiles. Up to five combinations of time intervals and light levels are possible. This feature does not require any extra wiring.

The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.

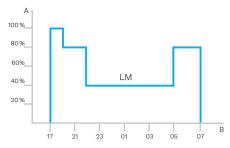


A. Dimming level | B. Time



### Dimming through 0-10V or DMX-RDM

Intelligent luminaire 0-10V drivers enable to operate dimming profiles. DMX-RDM is a protocol that allows bi-directional communication between a lighting fixture and a controller over a standard DMX line. This protocol allows configuration, status monitoring, and control of the lighting fixture. The standard has been developed by the Entertainment Services and Technology Association (ESTA) and is the current standard on the market.



A. Performance | B. Time



Schréder EXEDRA is the most advanced lighting management system on the market for controlling, monitoring and analysing streetlights in a user-friendly 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
- $\boldsymbol{\cdot}$  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 endusers 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.

# OMNISTAR KIT | CHARACTERISTICS

### Schréder

GENERAL INFORMATIO	N
Circle Light label	Score ≥90 - The product fully meets circular economy requirements
CE mark	Yes
ENEC certified	Yes
ENEC+ certified	Yes
UL certified	Yes
TUV ball throwing compliant	Yes
RCM mark	Yes
Testing standard	EN 60598-1 EN 60598-2-1 LM 79-08 (all measurements in ISO17025 accredited laboratory)

<sup>·</sup> Score >90 only for OMNISTAR KIT STD and OMNISTAR KIT PRO

#### HOUSING AND FINISH

Housing	Aluminium
Optic	Aluminium reflector PMMA
Protector	Tempered glass Polycarbonate
Housing finish	Polyester powder coating Standard polyester powder coating (C2-C3 according to the ISO 9223-2012 standard) Optional "seaside" polyester powder coating (C4 according to the ISO 9223-2012 standard) Optional "seafront" polyester powder coating with anodisation (C5-CX according to the ISO 9223-2012 standard)
Tightness level	IP 66
Impact resistance	IK 08, IK 10
Vibration test	Compliant with ANSI C 136-31 standard, 1.5G load Compliant with ANSI C 136-31 standard, 3G load
Explosion proof compliance	IECEx / ATEX according to EN 60079   TÜV 16 ATEX 7895 X   Ex II 3 G Ex nR IIC T4 Gc   TÜV 16 ATEX 7896 X   Ex II 2 D Ex tb IIIC T100°C Db   IECEx TUR 16.0037X

- · Explosion proof version only available for OMNISTAR KIT PRO
- $\cdot$  IK 10 only for the optical unit equipped with a polycarbonate protector
- $\cdot$  Depending on the luminaire configuration. For more details, please contact us

#### OPERATING CONDITIONS

temperature range with wind effect (Ta)
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 $<sup>\</sup>cdot$  Depending on the luminaire configuration. For more details, please contact us.

ECTDICAL	INFORMATION

Electrical class	Class I
Nominal voltage	120-277V - 50-60Hz 220-240V - 50-60Hz 347-480V - 50-60Hz
Surge protection options (kV)	10 20
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-3-3 / EN 61547
Control protocol(s)	1-10V, DALI, DMX-RDM
Control options	Custom dimming profile, Remote management
Socket	NEMA 7-pin (optional)
Associated control system(s)	Schréder EXEDRA Schréder ITERRA

#### OPTICAL INFORMATION

LED colour temperature	2200K (Warm White WW 722) 2700K (Warm White WW 727) 3000K (Warm White WW 730) 3000K (Warm White WW 830) 4000K (Neutral White NW 740) 4000K (Neutral White NW 840) 5700K (Cool White CW 857)
Colour rendering index (CRI)	>70 (Warm White WW 722) >70 (Warm White WW 727) >70 (Warm White WW 730) >80 (Warm White WW 830) >70 (Neutral White NW 740) >80 (Neutral White NW 840) >80 (Cool White CW 857)
ULOR	0%
ULR	0%
III OD many ba differen	t according to the configuration Places consult up

- · ULOR may be different according to the configuration. Please consult us.
- · ULR may be different according to the configuration. Please consult us.

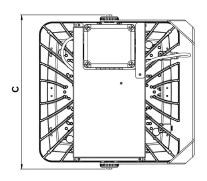
#### LIFETIME OF THE LEDS @ TQ 25°C

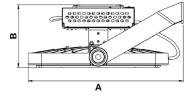
All configurations 100,00011 Loo (fight power LLD)	All configurations	100,000h - L95 (high-power LEDs)
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 $<sup>\</sup>cdot$  Lifetime may be different according to the size/configurations. Please consult us.

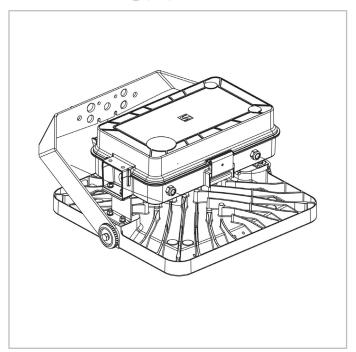
AxBxC (mm   inch)	OMNISTAR KIT STD: 586x294x581   23.1x11.6x22.9						
	OMNISTAR KIT PRO: 806x355x582   31.7x14.0x22.9						
	OMNISTAR KIT ECO : 586x237x582   23.1x9.3x22.9						
Weight (kg   lbs)	OMNISTAR KIT STD: 29.0   63.8						
	OMNISTAR KIT PRO : 33.0   72.6						
	OMNISTAR KIT ECO : 27.0   59.4						
Aerodynamic resistance (CxS)	OMNISTAR KIT STD: 0.23						
	OMNISTAR KIT PRO: 0.23						
	OMNISTAR KIT ECO: 0.23						
Mounting possibilities	Post-top slip-over – Ø76-108mm						
	Bracket enabling adjustable inclination						
	Surface mounting						
	Direct mounting on ceiling						

<sup>·</sup> For more information about mounting possibilities, please consult the installation sheet.

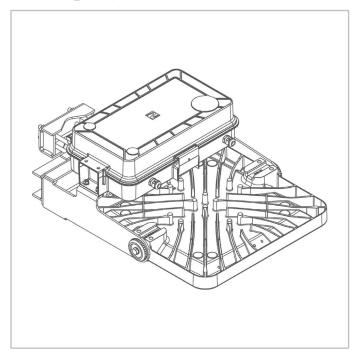




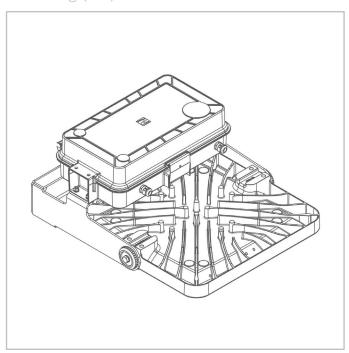
OMNISTAR KIT | Standard U-bracket for surface mounting (B5)



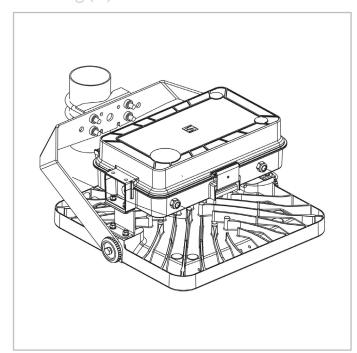
OMNISTAR KIT | Large U-bracket for pole mounting (PH)



OMNISTAR KIT | Large U-bracket for surface mounting (W2)



OMNISTAR KIT | Standard U-bracket for pole mounting (PI)





	Luminaire output flux (lm)												Luminaire efficacy
		White 722		White 727		White 730		White 830		l White 740	consumption (W)		(lm/W)
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
160	10700	51300	11800	56400	12600	60200	11800	56400	13600	65300	170	491	170
240	16100	64500	17700	70900	18900	75700	17700	70900	20500	82100	255	580	168

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5 %



	Luminaire output flux (lm)												Luminaire efficacy
	Warm WW	White 722		White 727		White 730		White 830		l White 740	consumption (W)		(lm/W)
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
160	10700	51300	11800	56400	12600	60200	11800	56400	13600	65300	170	491	170
240	16100	64500	17700	70900	18900	75700	17700	70900	20500	82100	255	580	168

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5 %



				wer	Luminaire							
		White 727		White 730		l White 740		White 857	consumption (W)		efficacy (lm/W)	
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to	
72	8600	24800	9600	27900	10200	30300	8800	27900	77	223	163	
144	17200	49700	19200	55900	20400	60600	17700	55900	153	445	164	

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5 %



			Power		Luminaire efficacy								
		White 722		White 727		White 730		White 830		l White 740	consumption (W)		(lm/W)
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
160	10700	51300	11800	56400	12600	60200	11800	56400	13600	65300	170	491	170
240	16100	64500	17700	70900	18900	75700	17700	70900	20500	82100	255	580	168

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %



	Luminaire output flux (lm)											wer	Luminaire efficacy
		White 722		White 727		White 730		White 830	Neutral White NW 740		consumption (W)		(lm/W)
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
160	10700	51300	11800	56400	12600	60200	11800	56400	13600	65300	170	491	170
240	16100	64500	17700	70900	18900	75700	17700	70900	20500	82100	255	580	168

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5 %



				wer	Luminaire efficacy						
	Warm W WW 7			White 730	Neutral White NW 740		Cool White CW 857		consumption (W)		(lm/W)
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
72	8300	24800	9600	27900	10200	30300	8800	27900	77	223	163
144	16700	49700	19200	55900	20400	60600	17700	55900	153	445	164

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

# OMNISTAR KIT | PERFORMANCE



	Luminaire output flux (lm)											wer	Luminaire
		White 722		White 727		White 730		White 830	Neutral White NW 740		consumption (W)		efficacy (lm/W)
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
160	10700	50400	11800	55400	12600	59100	11800	55400	13600	64200	162	508	179
240	16100	64500	17700	70900	18900	75700	17700	70900	20500	82100	243	580	176

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5 %



	Luminaire output flux (lm)											wer	Luminaire efficacy
		White 722		White 727		White 730		White 830		Neutral White NW 740		mption V)	(lm/W)
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
160	10700	50400	11800	55400	12600	59100	11800	55400	13600	64200	162	508	179
240	16100	64500	17700	70900	18900	75700	17700	70900	20500	82100	243	580	176

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5 %



				Power		Luminaire					
	Warm White WW 727		Warm White WW 730		Neutral White NW 740		Cool White CW 857		consumption (W)		efficacy (lm/W)
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
72	8600	24800	9600	27900	10200	30300	8800	27900	73	221	172
144	17200	49700	19200	55900	20400	60600	17700	55900	146	441	172

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5 %