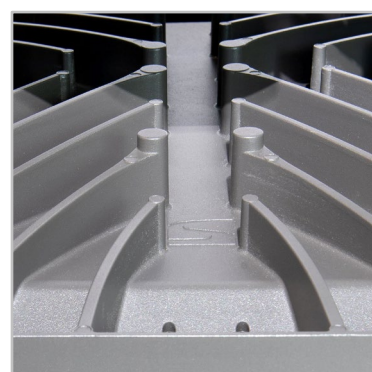


# OMNISTAR KIT



## 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 investment.

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

IK 08

CE



UL 1598  
CSA C22.2  
No. 250.0



BRIDGES



TUNNELS &  
UNDERPASSES



CAR PARKS



LARGE AREAS



INDUSTRIAL  
HALLS &  
WAREHOUSES



ROADS &  
MOTORWAYS



SPORT  
FACILITIES

## 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™ photometric concepts developed by Schröder. 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.



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.

## TYPES OF APPLICATION

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

## KEY ADVANTAGES

- Flexibility: modular approach for high-power 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



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



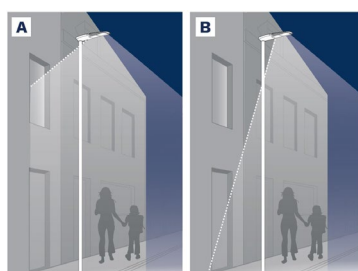
OMNISTAR KIT | OMNISTAR KIT PRO





## 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

## LENZO FLEX<sup>®</sup> 4 LensoFlex<sup>®</sup> 4

LensoFlex<sup>®</sup> 4 maximises the heritage of the LensoFlex<sup>®</sup> 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<sup>®</sup> 4 optics can feature backlight control to prevent intrusive lighting, or a glare limiter for high visual comfort.



## LENZO FLEX<sup>™</sup> 3 LensoFlex<sup>®</sup> 3

LensoFlex<sup>®</sup> 3 uses lenses made of mouldable and optical-grade silicon offering superior transparency and excellent photothermal stability. This withstands high driving currents and delivers maximised lumen output over time. As silicon offers a higher thermal resistance compared to PMMA, temperature is not as critical for LensoFlex<sup>®</sup> 3 engines. This offers two distinct advantages; LensoFlex<sup>®</sup> 3 ensures enhanced performance in warm climates and enables a high driving current to be used to increase the lumen output and a higher lm/kg ratio. It also does not suffer from yellowing over time.



## RE FLEXO<sup>™</sup> ReFlexo<sup>™</sup>

Using metal reflectors with a superior reflective co-efficient, the ReFlexo<sup>™</sup> 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<sup>™</sup> 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.

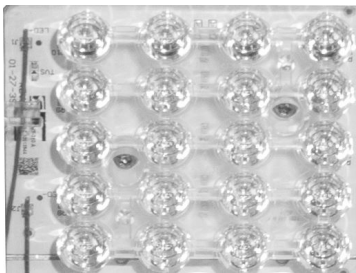






## BlastFlex™4

Using collimators made of high-transmission PMMA, the BlastFlex™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.

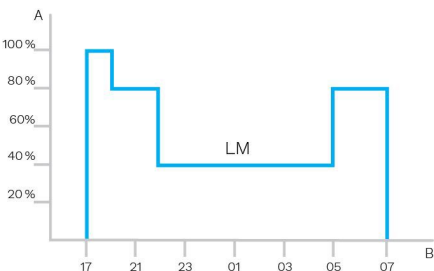




### Custom dimming profile

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

## Advanced Tunnel System 4 (ATS 4)

The ATS 4 (Advanced Tunnel System 4) is a powerful tunnel lighting control system for precise remote dimming and switching of each individual connected luminaire, based on various tunnel parameter inputs (emergency exits, smoke extraction system, traffic cameras, etc.).

The ATS 4 permanently communicates with the Lumgates, an RS422 closed-loop device connected to the luminaire drivers, to control the light intensity and provide command/reporting features.



## Advanced Tunnel System 4 DALI (ATS 4 DALI)

The Advanced Tunnel System 4 DALI provides the essential functions of the ATS 4 over a DALI network protocol, enabling dimming of luminaire clusters to be controlled collectively.

The ATS 4 DALI is the ideal solution to implement a reliable and powerful tunnel lighting control system with streamlined features and optimised costs.



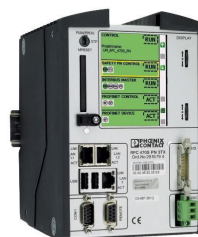
## Sensors and cameras

The ATS 4 can be connected to various sensors and cameras to permanently adjust the lighting levels to indoor and outdoor conditions and avoid any visual adaptation problems.



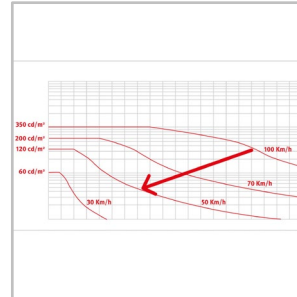
## Tunnel Control System 4 (TCS 4)

The Tunnel Control System 4 (TCS 4) is a gateway ensuring the connection/control of the multiple ATS 4 controllers as well as the communication with the central management system of the tunnel infrastructure (SCADA) if applicable.



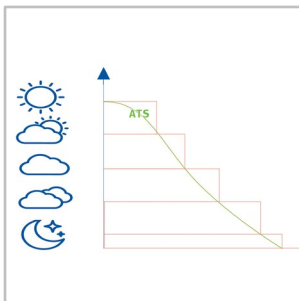
Jointly developed by Schröder and Phoenix Contact, the Advanced Tunnel System 4 (ATS 4) has been designed to control every lighting point or clusters of luminaires to perfectly adapt the lighting level according to conditions in the tunnel, to monitor the power consumption and to report the burning hours or any failure to facilitate maintenance. The system includes a self-commissioning feature and enables scenarios to be adapted remotely at any moment.

## ADAPTIVE LIGHTING ACCORDING TO SPEED



The ATS 4 can be linked to a traffic monitoring system to obtain data regarding speed or density to adapt the lighting level according to safety standards. This option further reduces energy consumption and increases the lifetime of the installation while ensuring the best driving conditions for motorists.

## PRECISE AND CONTINUOUS DIMMING



ATS 4 provides 25 different dimming levels to precisely adapt the lighting to the real needs. Without any over-lighting, the energy consumption is limited to what is absolutely necessary to ensure safe and comfortable driving conditions.

## ADAPTIVE LIGHTING ACCORDING TO POLLUTION

Based on cleaning cycles, the ATS 4 can take into account the depreciation of the flux due to dirt accumulation to continuously provide the requested lighting level in the tunnel. No more, no less. This feature offers additional energy savings while providing safety and comfort for users.

## FLEXIBILITY

Flexible redundancy offers security on multi-level applications, not only for the lighting.

## PLUG AND PLAY COMMISSIONING

This control system is easy to install and configure. The tunnel lighting study can be directly imported into the ATS 4 control system. This unique feature, in combination with the auto-addressing of the Lumigates, leads to an extremely short commissioning time once the fixtures have been installed.

The ATS 4 benefits from a complete set of toolless smart cables and connectors, allowing installers to speed up cabling and save valuable time on-site.

## INTERACTION WITH THIRD PARTY SYSTEMS

Every command or signal sent to or coming from a tunnel component (emergency exit, smoke extraction system, traffic management system...) can be used to trigger a responsive lighting scenario. All of the tunnel equipment can be controlled through the same bus command.

## MAXIMISED SAFETY

The system enables the easy set-up of emergency and disaster management scenarios.

**Schröder 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

Schröder 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 Schröder EXEDRA system relies on shared and open technologies. Schröder 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

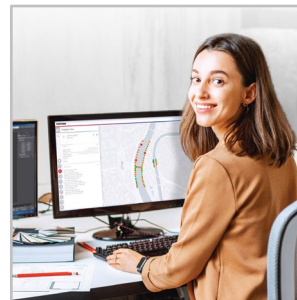
With EXEDRA, Schröder has taken a technology-agnostic approach: we rely on open standards and protocols to design an architecture able to interact seamlessly with third-party software and hardware solutions. Schröder EXEDRA is designed to unlock complete interoperability, as it offers the ability to:

- 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 Schröder EXEDRA, operate Schröder'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

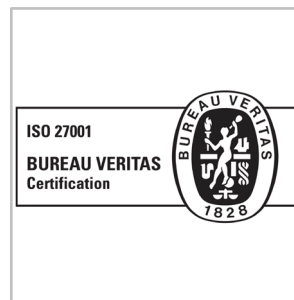


Schröder EXEDRA includes all advanced features needed for smart device management, real-time and scheduled control, dynamic and automated lighting scenarios, maintenance and field operation planning, energy consumption management and third-party connected hardware integration. It is fully configurable 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

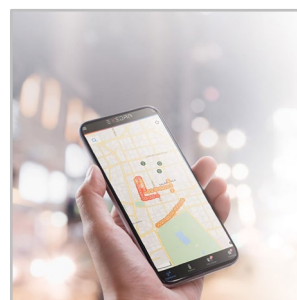
Data is gold. Schröder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.

## Protected on every side



Schröder EXEDRA provides state-of-the-art 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 Schröder 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 Schröder 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.



## GENERAL INFORMATION

Recommended installation height	8m to 45m   26' to 148'
Circle Light label	Score ≥90 - The product fully meets circular economy requirements
Driver included	Yes
CE mark	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)

· Score >90 only for OMNISTAR KIT STD and OMNISTAR KIT PRO

## HOUSING AND FINISH

Housing	Aluminium
Optic	Aluminium reflector PMMA Silicon
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
Vibration test	Compliant with modified IEC 68-2-6 (0.5G) Compliant with ANSI C 136-31 - 3G and IEC 68-2-6 - 1.5g
Access for maintenance	Tool-less access to gear compartment
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 IIC T100°C Db   IECEX TUR 16.0037X

· Explosion proof version only available for OMNISTAR KIT PRO

· Depending on the luminaire configuration. For more details, please contact us

## OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +55°C / -22°F up to 131°F with wind effect
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· Depending on the luminaire configuration. For more details, please contact us.

## ELECTRICAL INFORMATION

Electrical 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	Bi-power, Custom dimming profile, Remote management
Socket	NEMA 7-pin (optional)
Associated control system(s)	Advanced Tunnel System 4 (ATS 4) Schröder EXEDRA Schröder ITERRA

## OPTICAL INFORMATION

LED colour temperature	3000K (WW 730) 3000K (WW 830) 4000K (NW 740) 4000K (NW 940) 5700K (CW 957)
Colour rendering index (CRI)	>70 (WW 730) >80 (WW 830) >70 (NW 740) >90 (NW 940) >90 (CW 957)
ULOR	0%
ULR	0%

· 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

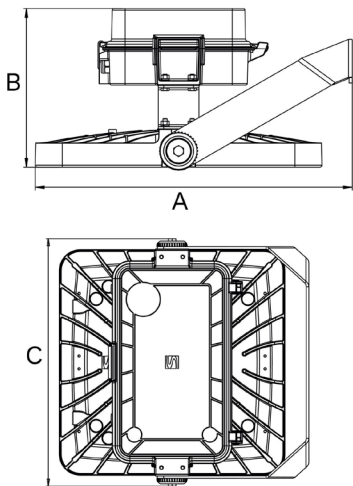
All configurations	100,000h - L85
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· Lifetime may be different according to the size/configurations. Please consult us.

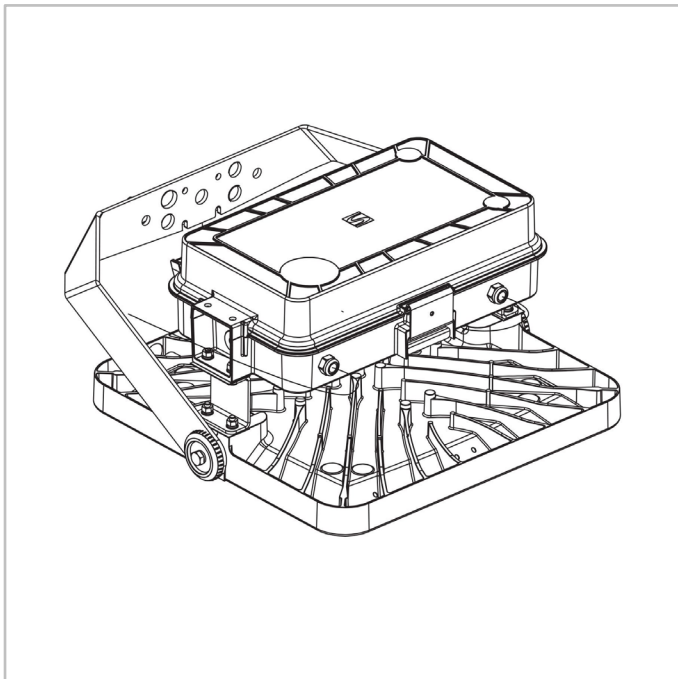
DIMENSIONS AND MOUNTING

AxBxC (mm   inch)	OMNISTAR KIT STD : 586x294x581   23.1x11.6x22.9 OMNISTAR KIT PRO : 806x355x582   31.7x14.0x22.9 OMNISTAR KIT ECO : 530x351x582   20.9x13.8x22.9
Weight (kg   lbs)	OMNISTAR KIT STD : 28.0   61.6 OMNISTAR KIT PRO : 35.0   77.0 OMNISTAR KIT ECO : 25.6   56.3
Aerodynamic resistance (CxS)	OMNISTAR KIT STD : 0.23 OMNISTAR KIT PRO : 0.23 OMNISTAR KIT ECO : 0.23
Mounting possibilities	Post-top slip-over – Ø60mm Post-top slip-over – Ø76-108mm Bracket enabling adjustable inclination Surface mounting Direct mounting on ceiling

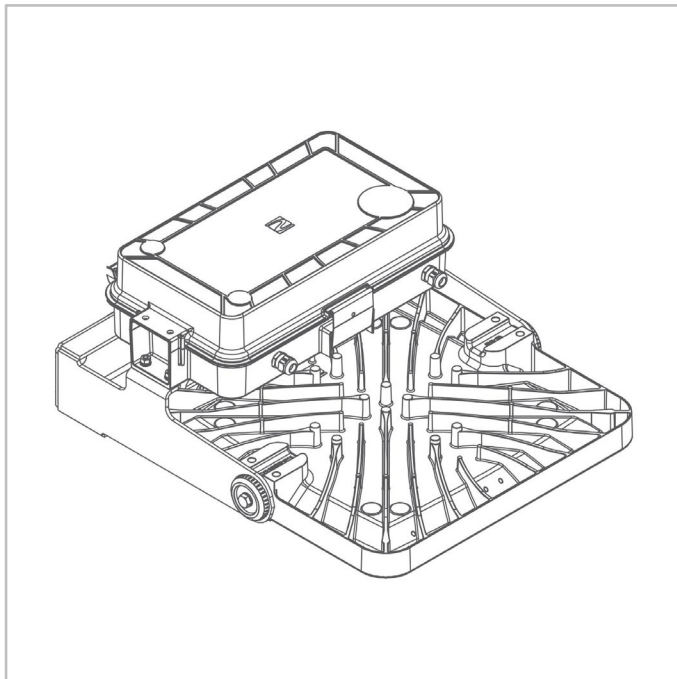
· For more information about mounting possibilities, please consult the installation sheet.



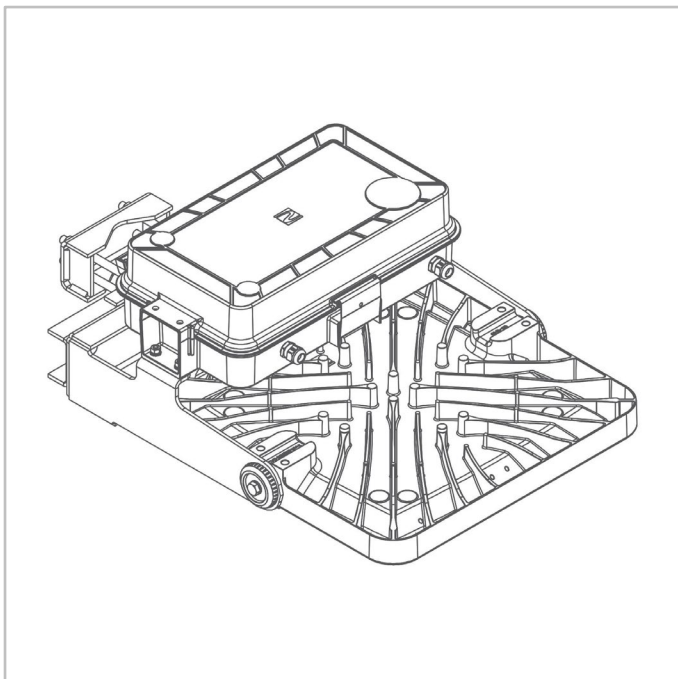
OMNISTAR KIT | Standard U-bracket (for surface mounting)



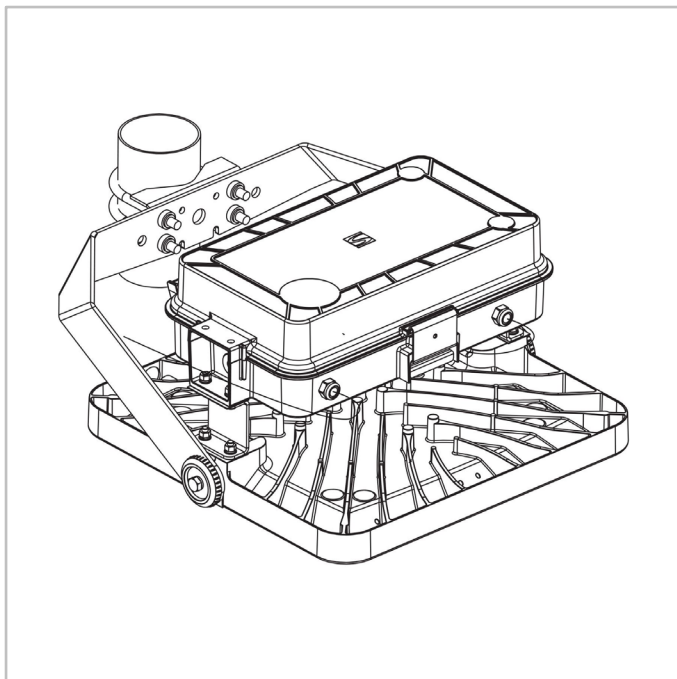
OMNISTAR KIT | Large U-bracket (for wall mounting)



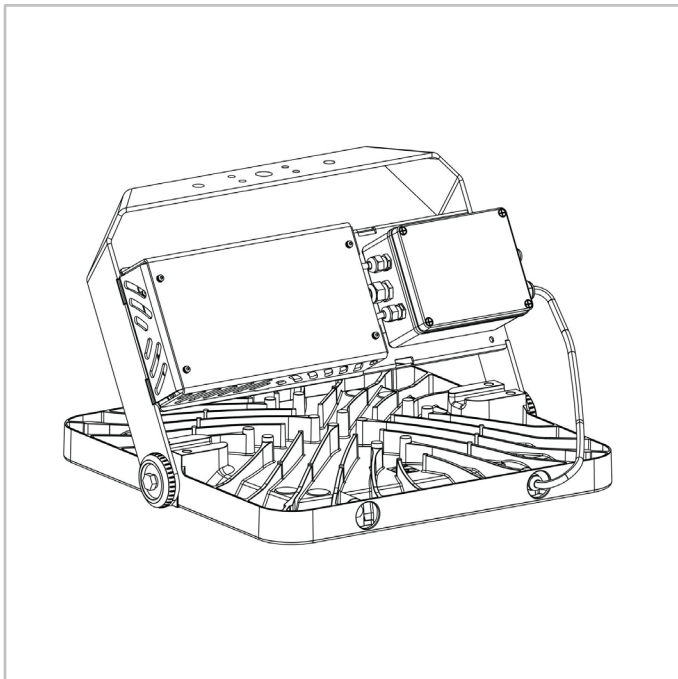
OMNISTAR KIT | Large U-bracket (for pole mounting)

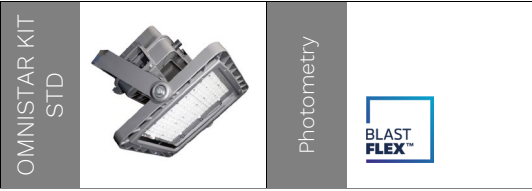


OMNISTAR KIT | Standard U-bracket (for pole mounting)



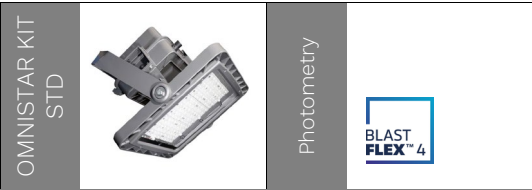
## OMNISTAR KIT | OMNISTAR KIT ECO surface bracket





Luminaire output flux (lm)											Power consumption (W)		Luminaire efficacy (lm/W)
Warm White 730		Warm White 830		Neutral White 740		Neutral White 940		Cool White 957					
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
72	11700	26500	5800	30200	6700	34700	5600	29300	5800	30400	73	265	160
144	23800	52200	11700	59100	13400	67800	11300	57300	11700	59500	146	530	160

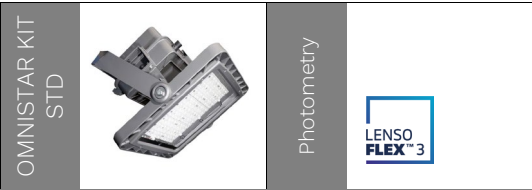
Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %



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Warm White 730		Warm White 830		Neutral White 740						
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Up to	
160	12300	60400	20800	58000	13400	65900	168	508	170	
240	33500	74100	32600	63100	36600	81000	252	594	167	

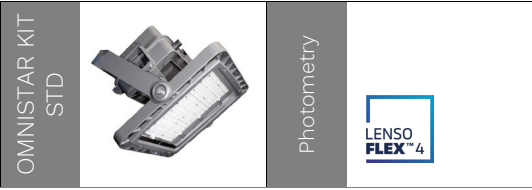
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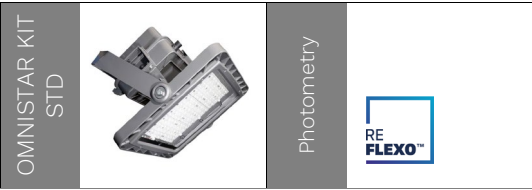
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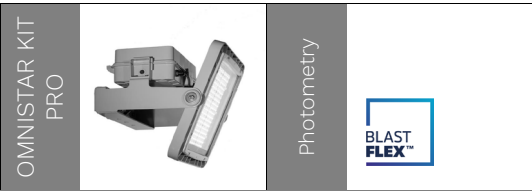
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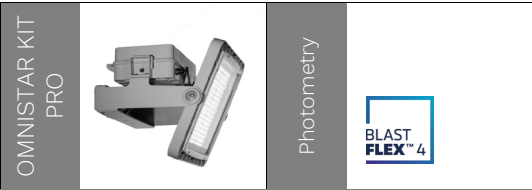
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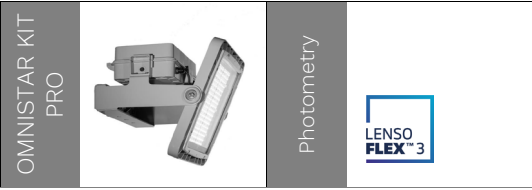
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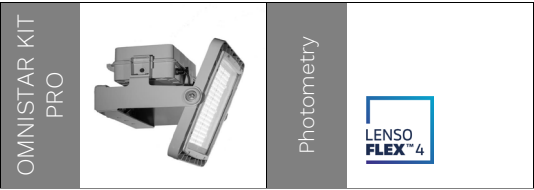
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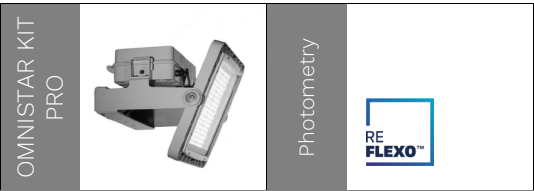
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240	33500	74000	32600	63000	36600	80800	252	594	167	

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



		Luminaire output flux (lm)										Power consumption (W)		Luminaire efficacy (lm/W)
		Warm White 730		Warm White 830		Neutral White 740		Neutral White 940		Cool White 957				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to	
72	11700	26500	5800	30200	6700	34700	5600	29300	5800	30400	73	265	160	
144	23800	52100	11700	59100	13400	67800	11300	57300	11700	59500	146	530	160	

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



Luminaire output flux (lm)									Power consumption (W)		Luminaire efficacy (lm/W)
Warm White 830		Neutral White 740		Neutral White 940		Cool White 957					
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
144	30200	63000	34600	72200	29200	61000	30300	63300	302	619	140

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



Luminaire output flux (lm)							Power consumption (W)		Luminaire efficacy (lm/W)
Warm White 730			Warm White 830		Neutral White 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Up to
160	22100	59600	21500	58000	22700	61200	353	508	135

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



Luminaire output flux (lm)									Power consumption (W)		Luminaire efficacy (lm/W)
Warm White 830		Neutral White 740		Neutral White 940		Cool White 957					
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
144	30200	63000	34600	72200	29200	61000	30300	63300	302	619	140

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



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Luminaire output flux (lm)							Power consumption (W)		Luminaire efficacy (lm/W)
Warm White 730		Warm White 830		Neutral White 740					
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Up to
160	22100	59600	21500	58000	22700	61200	353	508	135

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

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Photometry



Luminaire output flux (lm)									Power consumption (W)		Luminaire efficacy (lm/W)
Warm White 830		Neutral White 740		Neutral White 940		Cool White 957					
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
144	30200	63000	34600	72200	29200	61000	30300	63300	302	619	140

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



