

# SIRIUS<sup>®</sup>

## Glare-free light

The high-performance floodlight for sports and event lighting  
in a single system

[www.dael.pt](http://www.dael.pt)



# The best lighting for stadiums, arenas and TV

The SIRIUS® high-performance floodlight combines sports and event lighting in a revolutionary floodlight system, which even exceeds official FIFA and UEFA standards.

Benefit from the best visibility on the field of play and from the tribune: with maximum glare reduction and special color intensity, while offering energy savings of up to 40 percent compared to traditional HIT lamps.

SIRIUS® boasts high performance and excellent efficiency with optimum light and color rendering—for outstanding live transmission conditions and flicker-free super slow motion, both in Ultra HD and 8K to fulfill future TV transmission standards.

Present your event in the best possible light, as a visual feast for players and viewers alike, whether in the stadium or arena or at home.



**Perfect visibility**  
maximum glare reduction  
owing to full-cut-off technology

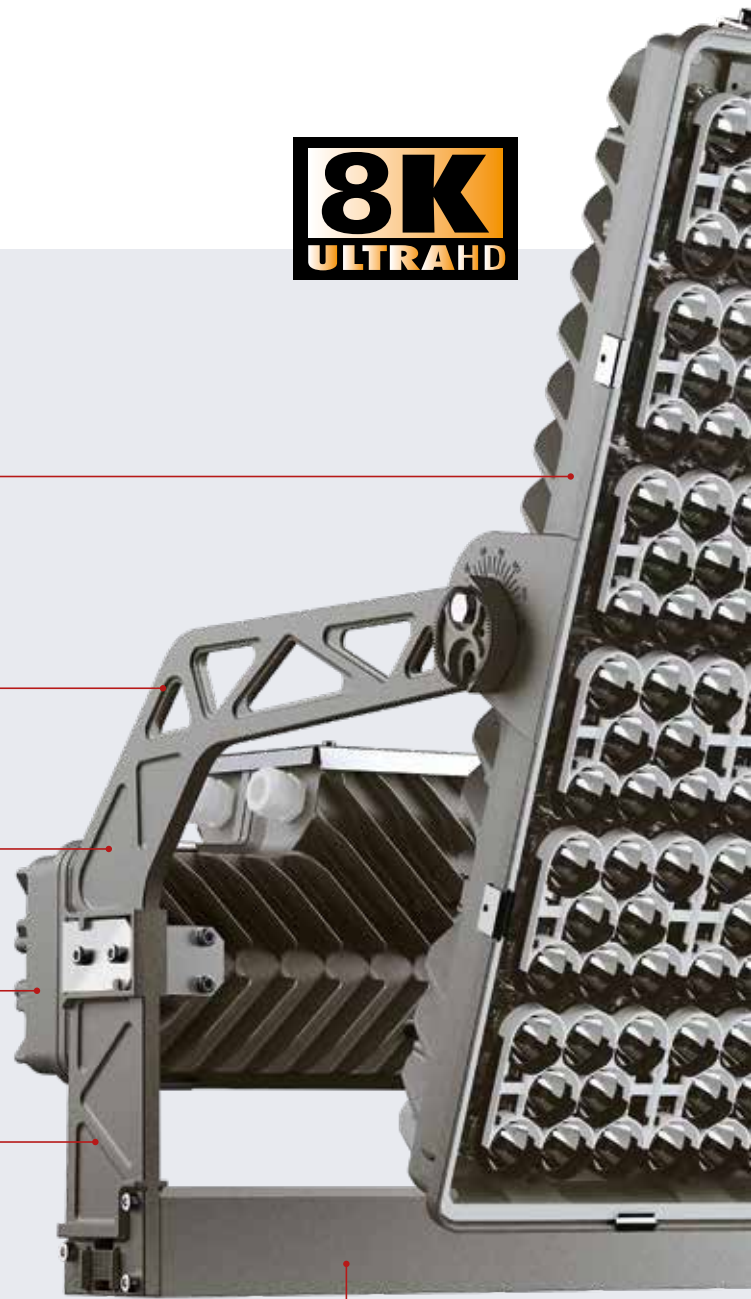
**Low power consumption  
and long lifespan**  
owing to temperature-sensitive  
constant lumen output control  
with CLO 2.0

**Simplified maintenance planning**  
due to predictive maintenance functionality

**Ideal for all types of sport**  
can be used for both indoor  
and outdoor applications

**Suitable for all arenas and stadiums**  
from small stadiums to the Premier League

**Flicker-free super slow motion**  
for TV transmissions





**Energy-efficient**

-40 % energy compared to traditional HIT lamps



**Temperature-resistant**

- Outdoors up to +55 °C, cold-resistant to -30 °C
- Indoors up to +45 °C, cold-resistant to -30 °C



**At a glance**

- Rated luminous flux of up to 255,000 lm at 5000 K
- Performance level of up to 150 lm/W
- Rated service life of up to 50,000 hours
- Light color in 4000 K, 5000 K and 5700 K
- Television Lighting Consistency Index (TLCI) of 96 at 5700 K
- Glare reduction with UGR 10/12 for rotosymmetrical light distribution
- 10 light distributions (asymmetrical, rotationally symmetric)
- Low network load: starting current of 16 A at 230V/50–60 Hz
- Silver reflector with outstanding optical efficiency

**Future-proof**

exceeds current FIFA and UEFA standards

**Higher lighting level and quality**

as direct replacement for classic floodlights

**Significant reduction in the number of floodlights**

compared to the market standard

**Highly efficient**

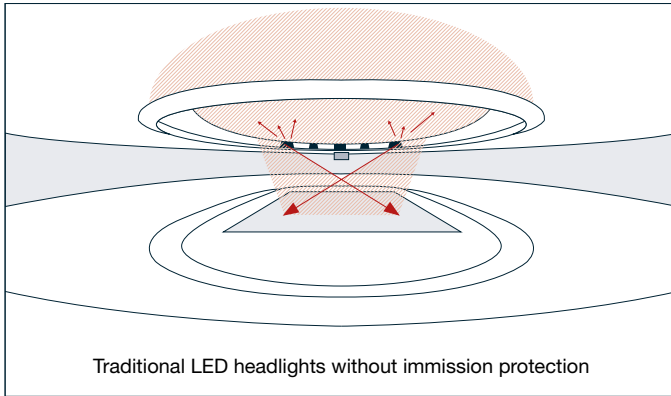
thanks to integrated silver reflectors

**Excellent color rendering**

with best-in-class TLCI of up to 96

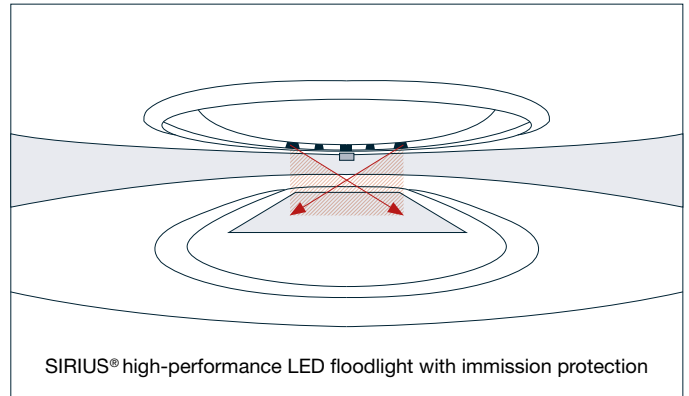
**Extremely robust**

high vibration stability (tested with more than 520,000 strokes), dust-protected and waterproof (IP66), extremely high impact resistance of IK10, protection rating of I



Traditional LED headlights without immission protection

Conventional floodlight systems generate increased light pollution—and therefore adversely affect the environment, neighboring areas and air traffic.



SIRIUS® high-performance LED floodlight with immission protection

SIRIUS® enables highly targeted illumination of the required surface. There is no adverse impact on the surroundings and environment since scattered light is kept to a minimum.

# Technical sophistication: Only the best is good enough

## Excellent visibility thanks to outstanding glare reduction

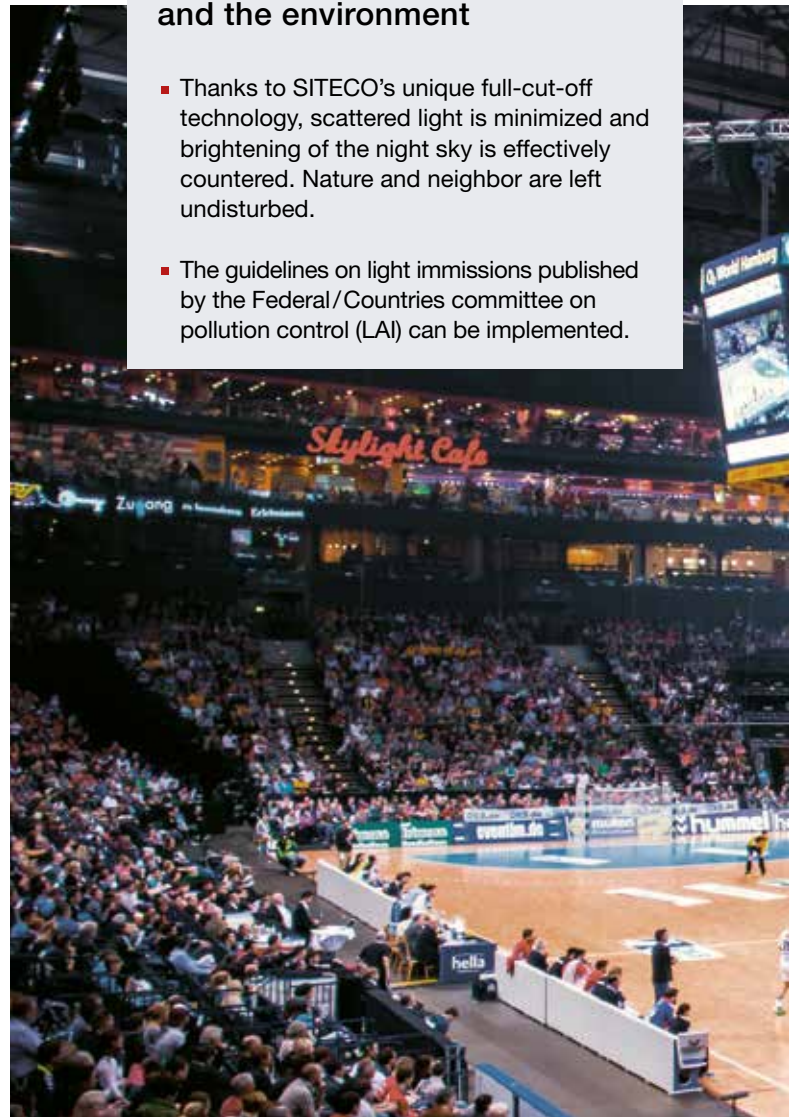
The SIRIUS® full-cut-off floodlight boasts maximum glare reduction over and above the typical market standard. This especially high glare reduction is achieved thanks to perfectly honed light bundling, virtually eliminating any residual scattered light, and resulting in minimal light immission. The effect is incredible: The absence of latent interference from scattered light means that the actions on the field of play are perceived more directly by spectators and with greater sharpness and color intensity—for a natural and immediate stadium experience of the big moments and emotions.

## High-quality materials for optimum results

We deliberately chose to fit the SIRIUS® high-performance floodlights with high-quality silver reflectors to achieve an especially high level of reflection. Optical efficiency is enhanced by up to 95 percent as a result—a significant difference compared to aluminum-coated reflectors—thus also allowing the luminous flux to be increased. The efficiency of the lighting system is enhanced, while power consumption is reduced at the same time.

## Scattered light is minimized— a major plus for neighbors and the environment

- Thanks to SITECO's unique full-cut-off technology, scattered light is minimized and brightening of the night sky is effectively countered. Nature and neighbor are left undisturbed.
- The guidelines on light immissions published by the Federal/Countries committee on pollution control (LAI) can be implemented.



# Pure goose bumps: Light show and live events

## For top sports performance in the stadium and arena

Thanks to a host of ultra-modern technological features, SIRIUS® creates ideal lighting conditions for maximum visual comfort, allowing athletes, trainers and referees to maximize their performance—from the very first second. That's because the floodlight delivers 100 percent light output as soon as it is switched on.

This highlights the relevance of optimized lighting conditions when choosing the venue for large, high-powered live events. SIRIUS® delivers this required top quality and thus allows every event to be presented in the best light without fail.

## For effective entertainment in a class of its own

Versatile applications in a single system: In addition to optimum sports lighting, SIRIUS® also produces dynamic light sequences thanks to DMX control.

An impressive flashlight storm can be generated too, since the four floodlight buttons can be controlled independently of one another.

SIRIUS® comes with an open DMX interface, allowing you to produce your own light show creations automatically—for individual, inspiring moments that will live long in the memory.

## The best lighting

- **Dimming level can be adjusted individually**  
flexible dimming levels between 1 – 100 %
- **Flashlight storm**  
1 floodlight with 4 buttons,  
which can be controlled individually
- **Light entertainment**  
can be controlled via DMX interface





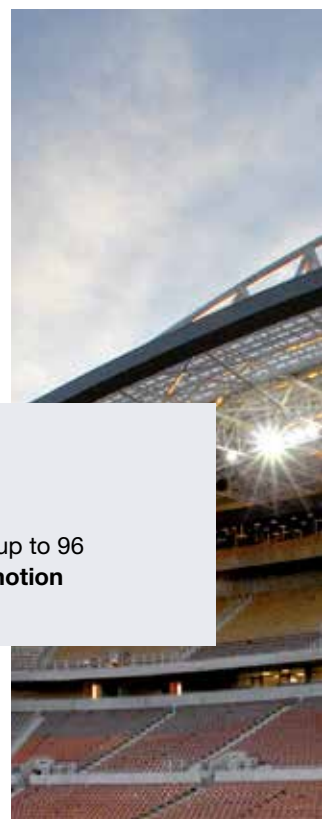
# Stadium feeling at home: SIRIUS® makes it possible

SIRIUS® delivers brilliant TV images with no need for post-editing thanks to perfect illumination of the stadium and arena. At the same time, the high-performance floodlight enables excellent color rendering and generation of razor-sharp super slow motion—and thus has all the features necessary for modern, high-quality sports broadcasting in the era of Ultra HD and 8K.

SIRIUS® boasts an especially high TLCI value of up to 96, in compliance with the requirements of the European Broadcasting Union (EBU). This extremely high value means that recordings can be made in what is currently the highest possible cinema standard, thereby exceeding the existing UEFA and FIFA requirements. The system is future-proof.

## The best lighting

- **Excellent color rendering** with best-in-class TLCI of up to 96
- **Flicker-free super slow motion** for TV transmissions



# Secure investment: For today and tomorrow

Simple maintenance and installation—when you opt for SIRIUS®, you are choosing a system designed for the future that saves money too thanks to its use of best-in-class technology:

- **Low power consumption and long lifespan**  
thanks to temperature-sensitive constant lumen output control with CLO 2.0
- **Simplified maintenance planning**  
due to predictive maintenance functionality
- **Ease of installation**  
with plug & play, ESD-proof, directly on the floodlight
- **Flexible assembly of the control gear**  
at a distance of up to 150m to the lighting head
- **Convenient installation**  
automatic parameterization between the LED lighting head and supply unit (control gear)

Upgrading with SIRIUS® to fulfill the new standards for stadium lighting is really worthwhile. That's because in comparison to traditional floodlights, SIRIUS® is up to 30 percent more powerful, thus already taking account of increasing requirements for stadium lighting. On one hand, for example, SIRIUS® allows existing standards to be fulfilled even with fewer floodlights than before, which simplifies maintenance and also reduces electricity costs. On the other hand, SIRIUS® can fulfill new and enhanced standards for stadium lighting with an unchanged number of floodlights. It is therefore possible in both cases to reuse existing attachment points, thus allowing savings in terms of installation costs. Assuming the appropriate system geometry therefore, existing floodlights can be replaced directly.

## High performance that pays off



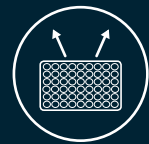
30%

Up to **30 % more powerful** than classic floodlights



-40%

Up to **40 % lower power consumption** at the same lighting level



Significantly **higher TLCI value**

