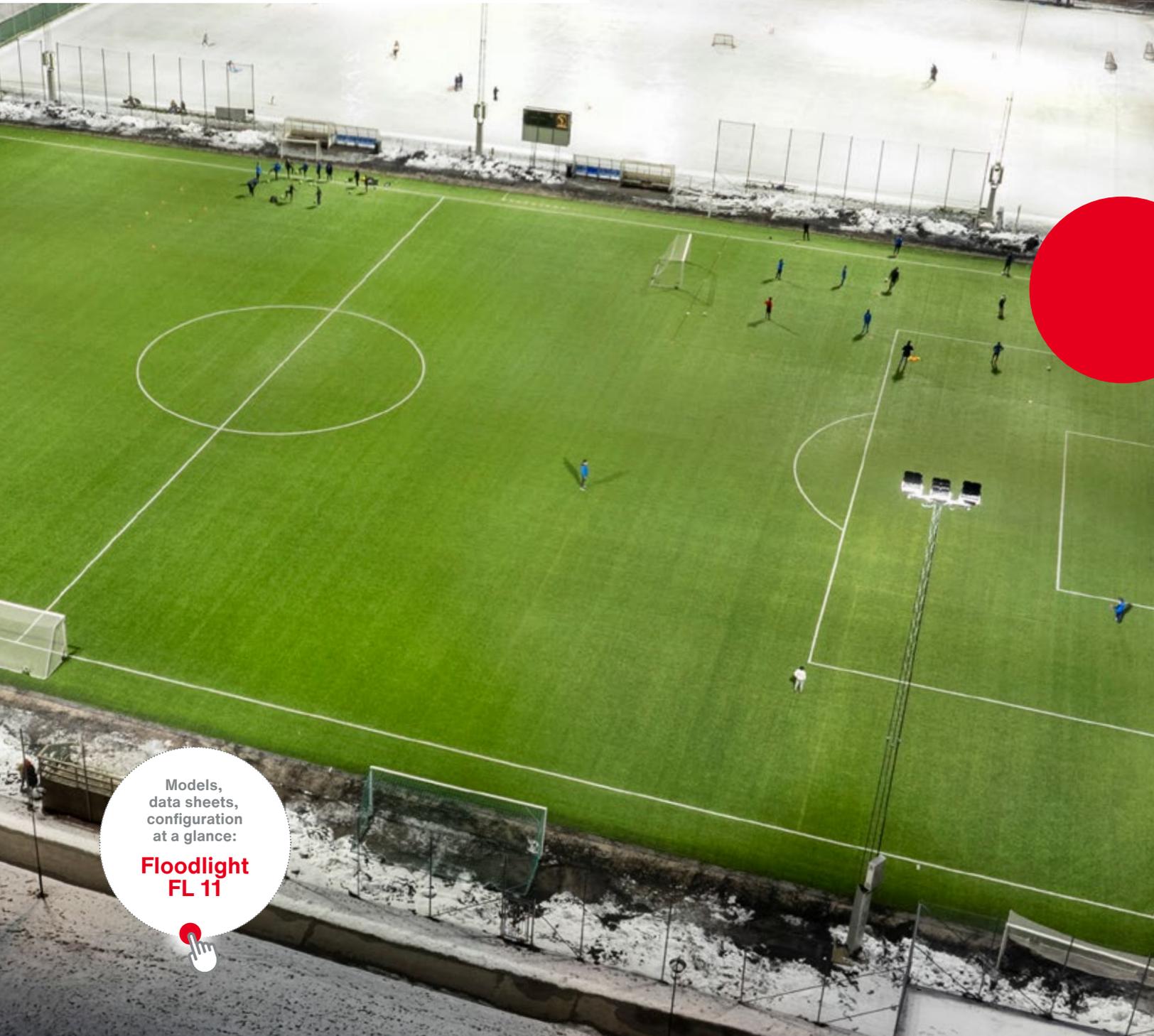


siteco

Floodlight FL 11

Pinpoint precision.
Infinite possibilities.



Models,
data sheets,
configuration
at a glance:

**Floodlight
FL 11**



Floodlight FL 11. The new dimension of light.



Become a minimalist.

Our power solution will enable you to save money, electricity and CO₂. It needs fewer luminaires than a competitive LED solution while increasing the precision of illumination with the help of a new light distribution system.

Don't do things halfway.

100 % flexibility in planning, installation, alignment and control. This also includes flexible placement of the ECG, LED modules that can be rotated 360°, and two sizes.

Say yes to environ- mental protection.

“Green” floodlights with replaceable components, recyclable materials, insect-friendly light colors and, most of all, no light pollution – all delivered in non-plastic packaging. “Environmental protection” are not empty words to us.

Infinite – and pinpoint.

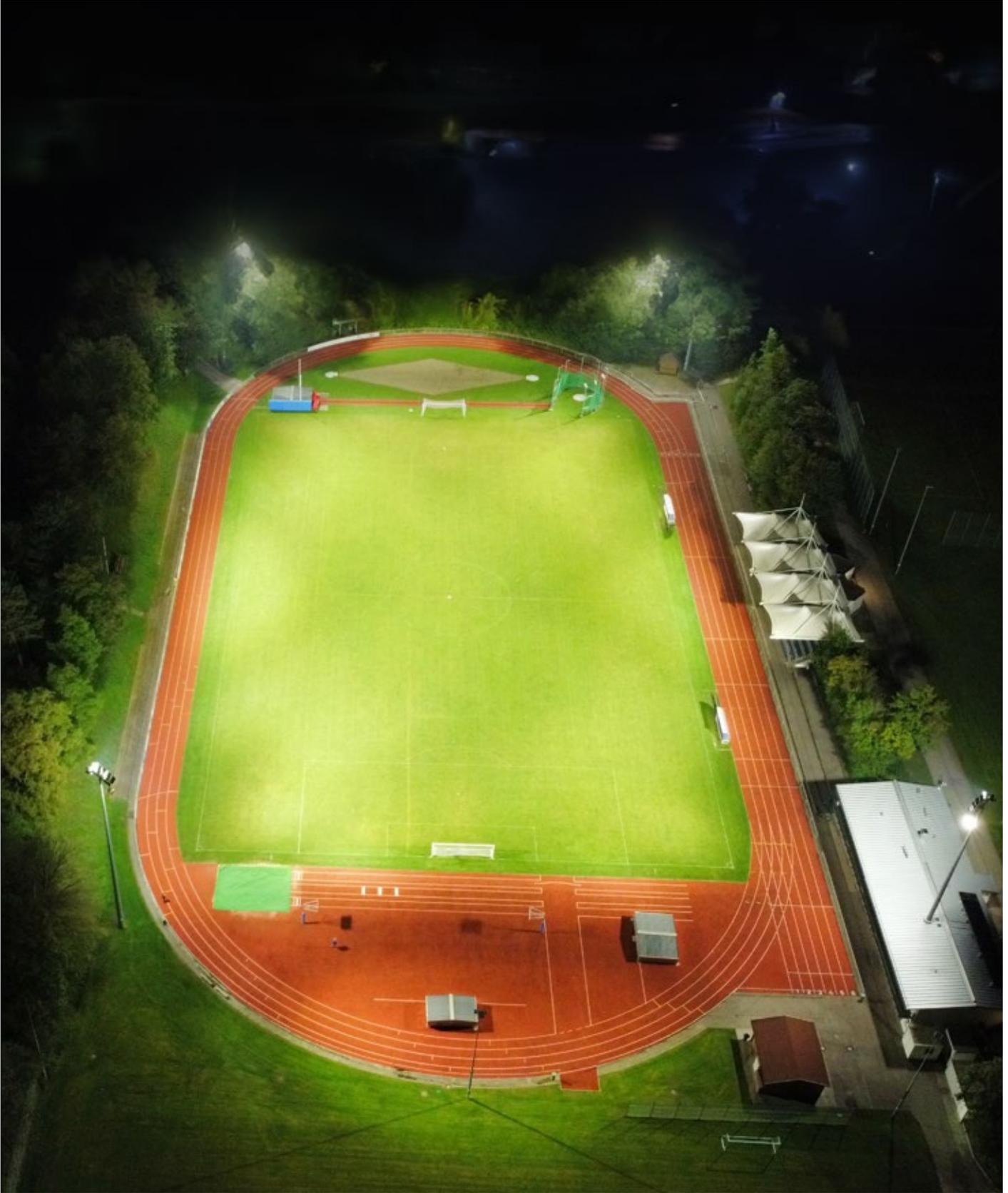
Top athletic performances require ideal lighting conditions. That's why our Floodlight FL 11 produces glare-free light and can be precisely controlled. It will exceed every expectation you ever had about the visual comfort of players and spectators.

The FL 11 meets all the needs of modern sports. It's energy efficient and easy to mount. And it's flexible enough to react precisely to changing circumstances on short notice. Whether it be sports grounds, playing fields or halls: FL 11 combines visual comfort, cost savings, climate protection and flexibility. The ideal light for both team players and lone warriors. And for perfectly illuminated sports thrillers.

New lm packages:
higher illuminance
on your
sports field!



- ⊕ Highly efficient operation with fewer luminaires thanks to a new light distribution system
- ⊕ Easy maintenance thanks to flexible ECG integration on the mast or luminaire
- ⊕ Glare-free light with 0 % obtrusive light that could bother residents and nature
- ⊕ Maximum flexibility and precision delivered by rotatable modules and adjustable light heads
- ⊕ Needs-based light control with DALI 2, DMX RDM and SITECO Connect Sports
- ⊕ Excellent color rendering and flicker-free super-slow motion for TV broadcasts
- ⊕ High-quality, long-lasting materials such as non-yellowing PMMA lenses, robust glass covers and die-cast aluminum
- ⊕ Low blue light component in the colour spectrum



Project: FC Aschheim, Germany

Product: Floodlight FL 11

The master of modification.

Since no two sports venues are exactly the same, the lighting can't be either. And it doesn't have to be. Floodlight FL 11 is designed to be as flexible as possible to meet all kinds of needs – from planning to installation to illumination.

Flexible installation

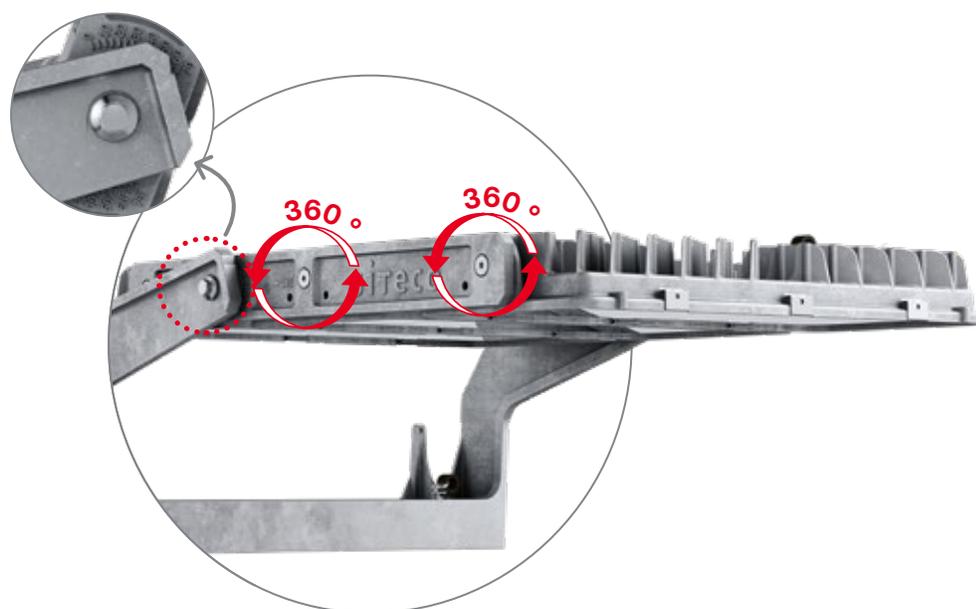
You decide where the driver should be affixed – compactly on the luminaire or wherever you like on the mast. Either way: With an external remotely positioned ECG, maintenance work is a matter of minutes.

Flexible connection

230V or 400V? Both, of course! You don't have to decide before placing an order. Floodlight FL 11 is equipped with a variable ECG that can handle both connection options.

Flexible adjustments

You can rotate the modules of the Floodlight FL 11 by 360°. The light head itself can be adjusted in 2.5° steps. Thus, the light beams can be adjusted with great precision and tailored to your needs.





0%
light pollution

Light – where athletes
need it and spectators
want it.



A new form of green light.

Light sets the pace of our lives. Artificial light can be a real annoyance. It can throw both us and nature off balance – with far-reaching consequences for on insects and the entire downstream food chain. But there's some good news: The FL 11 prevents it all from happening. It meets every criterion set by the latest environmental laws and planning directives. Because light has a special responsibility to assume as human settlements encroach more and more on the habitats of wildlife.

100 % precise – 0 % light pollution

Thanks to its new asymmetric light distribution system, the Floodlight FL 11 casts light with pinpoint and targeted precision onto the sports ground or playing field – and only there. Without any spill light or obtrusive light, the night sky remains dark. And nature and residents undisturbed.

Insect-friendly light for more biodiversity

The warmer the light color, the less it attracts insects. This is why SITECO's Floodlight FL 11 produces 3,000 K light, a color that's especially insect-friendly. Other animals benefit as well: all predators of insects, migratory birds and even fish and amphibians that live near human settlements.

Particularly insect-friendly
light with

3.000 K

The No. 1 on every soccer field.

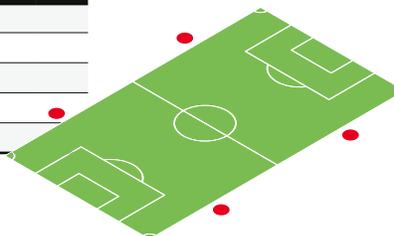
No matter whether you need 4- or 6-mast units – our Floodlight FL 11 can cover all established geometries. It also meets all current regulatory standards as well as professional requirements.

Putting the floodlight FL 11 to the test

Sports field: 105 × 68 m; light point height: 16 m

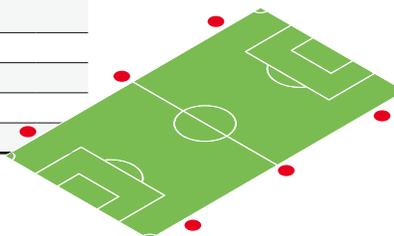
4-mast system

4 masts	FL 11 maxi pro		FL 11 maxi
	Lighting class II	Lighting class III	Lighting class III
Light distribution	12 × PL64	8 × PL64	8 × PL 64
Horizontal illuminance E_m	217 lx	165 lx	110 lx
Uniformity U_0 g_1	0,63	0,60	0,60
Total number of floodlights / field	12	8	8
GR max	47,4	45,5	45



6-mast system

4 corner masts and 2 center masts	FL 11 maxi pro		FL 11 maxi
	Lighting class II*	Lighting class III	Lighting class III
Light distribution	4 × PL64 8 × PL33T	2 × PL64 4 × PL33T	8 × PL33T
Horizontal illuminance E_m	242 lx	122 lx	109 lx
Uniformity U_0 g_1	0,72	0,67	0,61
Total number of floodlights / field	12	6	8
GR max	47,3	47,1	44,8



* Class II can also be realised with 10 floodlights. (E_m : 205 lx | U_0 g_1 : 0.63)

Illumination standards and professional requirements	Klasse I	Klasse II	Klasse III
Horizontal illuminance E_{av} lx	500	200	75
Uniformity U_0 E_{min} / E_{av}	0,7	0,6	0,5
GR	55	55	55
Color rendering index R_a	70	60	60

Notes on light distribution:

PL43: Field illumination, distribution in relation to light point height: width 4 / depth 3

PL33T: Field illumination, distribution in relation to light point height: width 3 / depth 3, with triangle distribution

PL64: Field illumination, distribution in relation to light point height: width 6 / depth 4

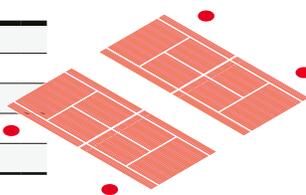
Game, set, match – on every tennis court.

Putting the floodlight FL 11 to the test

Tennis court: 35 × 35 m; light point height: 10 m

4-mast system

	FL 11 maxi pro	FL 11 maxi
4 masts	Lighting class II	Lighting class III
Light distribution	4 × PL64	4 × PL33T
Horizontal illuminance E_m	335 lx	269 lx
Uniformity U_0 g1	0,8	0,71
Total number of floodlights / field	4	4
GR max	44,2	48,8



Illumination standards and professional requirements	Class I	Class II	Class III
Horizontal illuminance E_{av} lx	500	300	200
Uniformity U_0 E_{min} / E_{av}	0.7	0.7	0.6
GR	50	50	55
Color rendering index R_a	70	60	60

Notes on light distribution:

PL33T: Field illumination, distribution in relation to light point height: Width 3 / depth 3, with triangular distribution

Your light, your way, at a push of a button.

Wide range of lighting scenarios.

First training on the sports field with dimmed half-field lighting, followed by a derby match with brilliant color rendering for TV broadcasts. Check. Today an indoor championship match, tomorrow the venue for a trade show. Anytime. With our app, personalized scenes are quickly and easily programmed.

For optimal light at every game.

Half field lighting

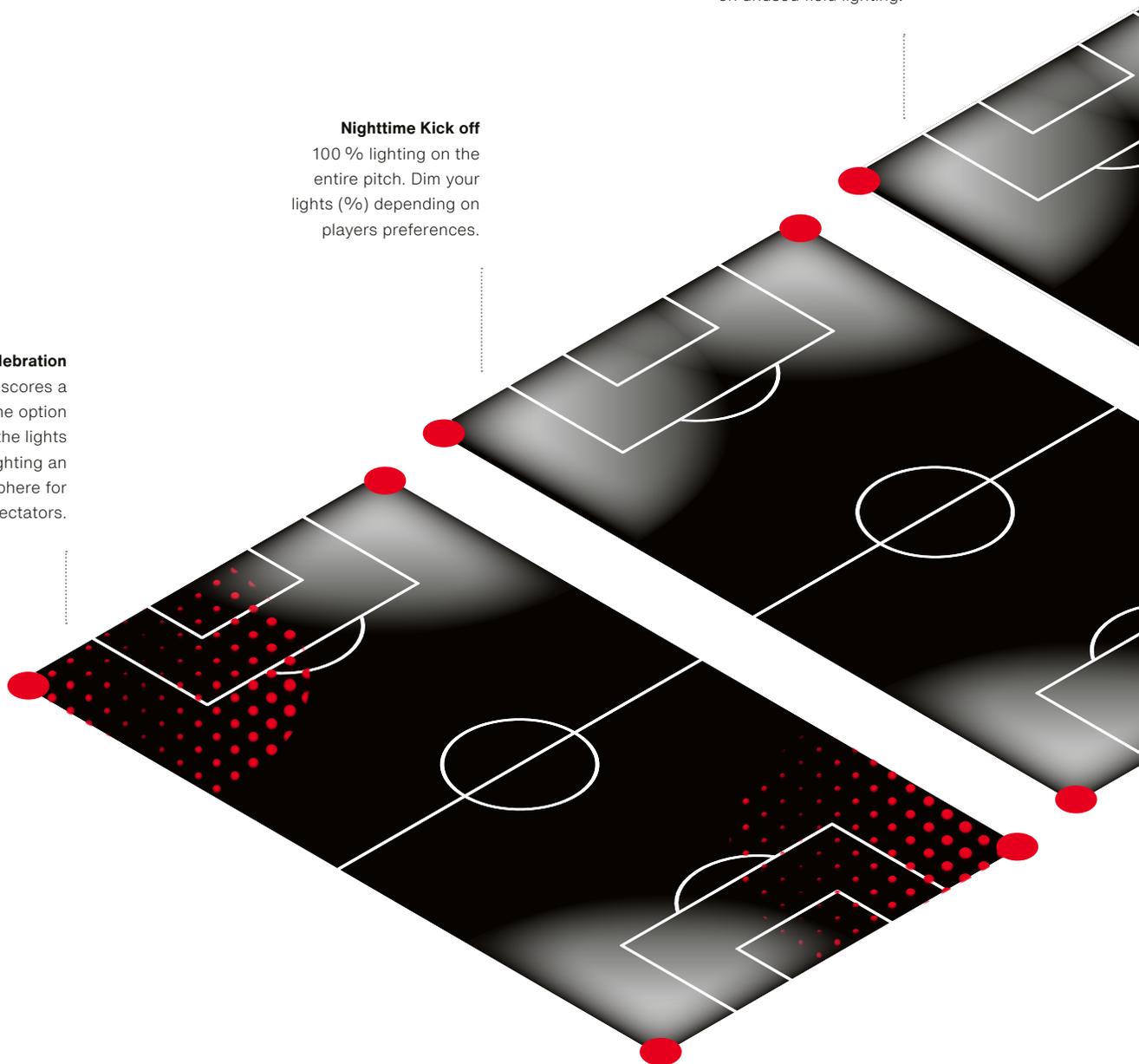
The user will have the opportunity to voluntarily illuminate half of the pitch only. Saving energy on unused field lighting.

Nighttime Kick off

100 % lighting on the entire pitch. Dim your lights (%) depending on players preferences.

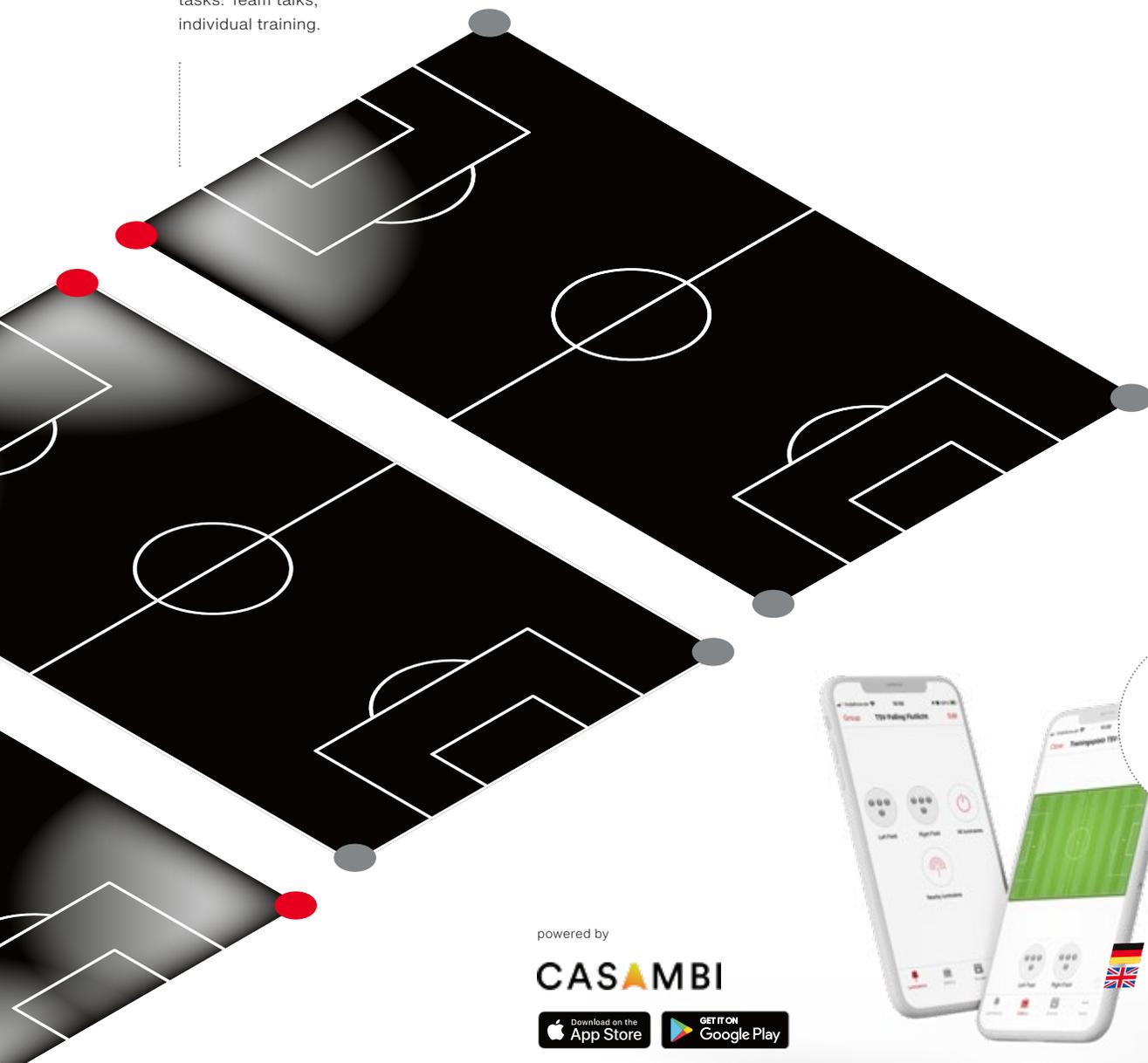
Goal celebration

When a player scores a goal, there is the option to briefly flicker the lights (7 secs). Lighting an electric atmosphere for players and spectators.



Multifunctional single light

Turn on a single floodlight for smaller tasks. Team talks, individual training.



powered by

CASAMBI



- **Simple light control** with Tablet or Smartphone (Android or iOS)
- **No Wifi Connection and new cabling required**
- **Flexible usage & settings** to support your individual lighting needs
- **Maximum possibilities for energy savings** due to adapted lighting scenarios
- **Fully compatible** with all FL 11 Dali variants
- **Personalized accounts:** e.g. for trainers
- **One-time investment** – no licensing fees

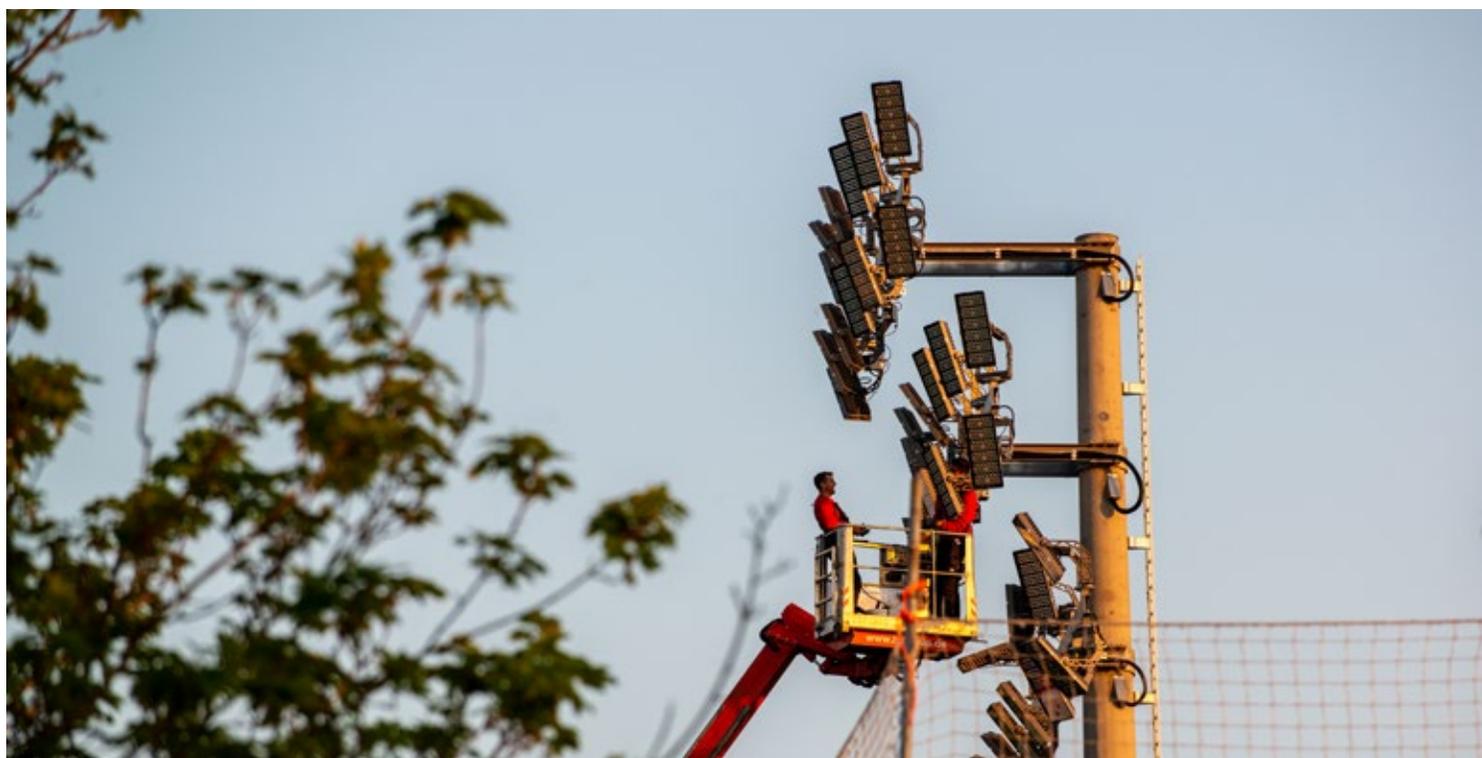
Lighting is teamwork. Truly the best lighting solution for you.

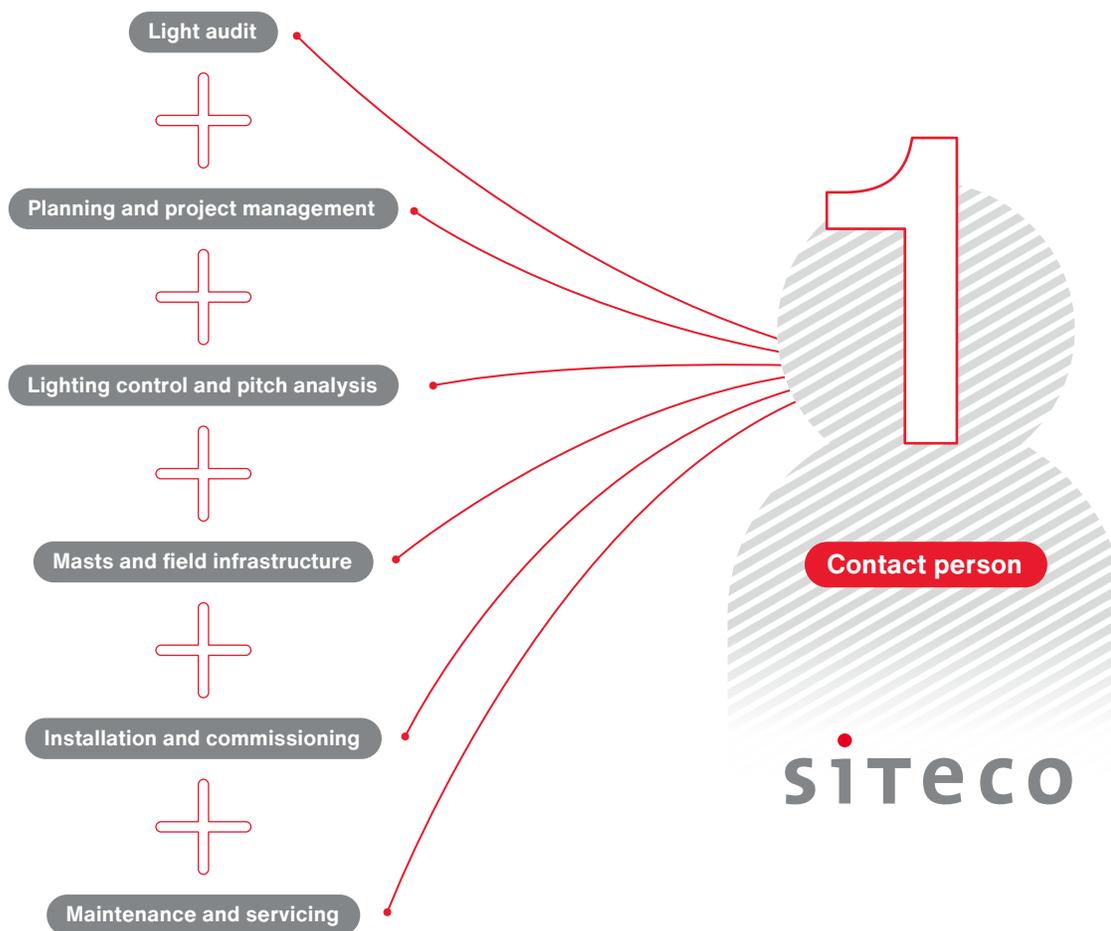
Would you rather focus on your core business?

No problem: SITECO is the right partner by your side. We support you from the idea all the way to commissioning your lighting. We take care of funding subsidies and financing options. And once the lighting is up and running, we'll make sure everything is operating smoothly and your energy consumption is as low as possible.

How does our project management help you?

- Accompany project on site
- Coordinate and control project
- Install and accept lighting systems
- Assign and outsource partner companies
- Optimize and conclude contracts
- Organize tests and measurements
- Document project





Our service is modular. You choose where we support you.

For each service module, we have trained specialists with many years of experience in the electrical industry. And if required, our professional project managers will manage your project for you. You get your reliable contact person who coordinates all steps. So that everything happens at the right time. So that all partners are well integrated. For the entire project. At any time.

Floodlight FL 11 models



FL 11 maxi

Technical data

Rated luminous flux: up to 147,000 lm
 Rated output: up to 1,022 W
 Luminous efficacy: up to 144 lm/W
 Rated service life: up to 100,000 h
 Recommended light point height: 10 m or higher

Models

Power (for outdoor sports facilities)
 Longlife (for industry and indoor use)

Weight

With ECG on the bracket, 23.1k g; remote 17.2 kg

Applications

Sports fields, stadiums, arenas, airports, container terminals

Light distribution

1 2 3 4 5 6 7



FL 11 maxi pro

Technical data

Rated luminous flux: up to 220,500 lm
 Rated output: up to 1,540 W
 Luminous efficacy: up to 143 lm/W
 Rated service life: up to 100,000 h
 Recommended light point height: 16 m or higher

Models

Power (for outdoor sports facilities)
 Longlife (for industry and indoor use)

Weight

With ECG on the bracket, 29.4 kg; remote 23.5 kg

Applications

Sports fields, stadiums, arenas, airports, container terminals

Light distribution

1 2 3 4 5 6 7

Optical concept

Non-yellowing PMMA lenses

Light colors

3,000 K | 4,000 K | 5,000 K | 5,700 K
 Color rendering: CRI 70 | CRI 80/90 (5,700 K only)
 or upon request
 Light pollution: 0 %

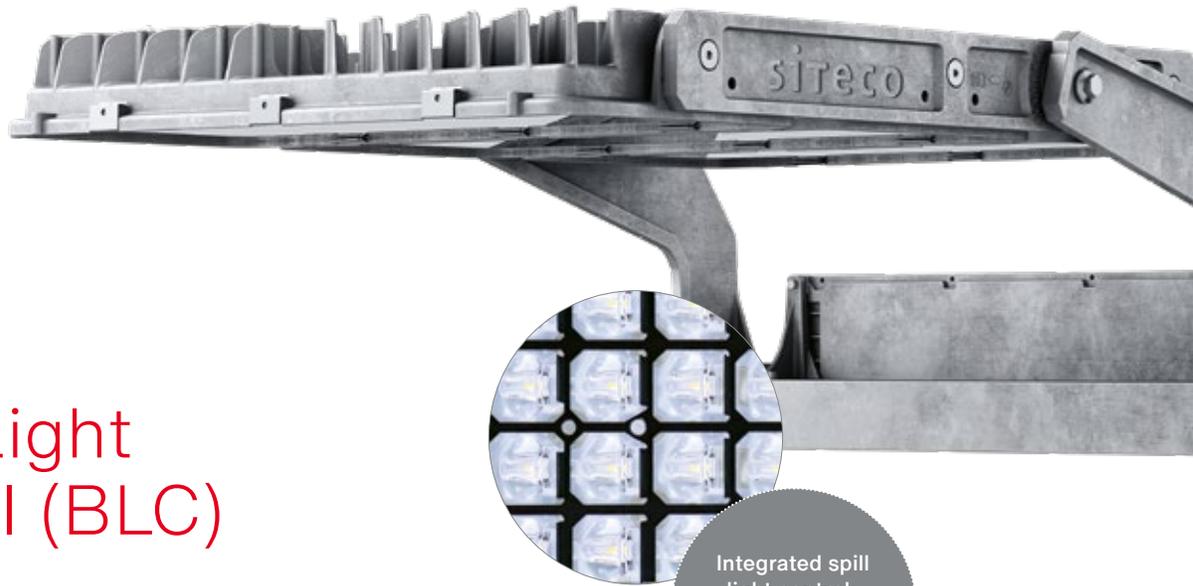
Type of protection

IP66
 Safety class: I



Models at a glance

ECG on the bracket or remotely positioned up to 150 m away
 Nominal voltage: 220 ... 240V | 380 ... 400V, 50/60 Hz, AC
 DALI2 or DMX-RDM



Back Light Control (BLC)

Integrated spill light control:
No additional wind load, no static problems

Would you like to ensure minimal rearward light spill? If so, you have to look no further than our Back Light Control: BLC enables you to adjust your light with even greater precision.

Light distribution for FL 11 models:

<p>1</p> <p>PL64 – to illuminate areas using a wide beam spread</p>	<p>2</p> <p>PL33T – to illuminate corners</p>	<p>3</p> <p>PL52 – to illuminate wide streets and parking lots</p>	<p>4</p> <p>PL61 – to illuminate streets with widely separated light points</p>
<p>5</p> <p>PL43 – to illuminate areas using a wide beam spread</p>	<p>6</p> <p>RS07 RS08 RS12 – to illuminate long distances in stadiums and halls</p>	<p>7</p> <p>RSD11 RSD12 RSD13 – to illuminate long distances in stadiums and halls with maximum luminous flux</p>	



Environmental protection. Implemented honestly.

Is a product sustainable because it uses less energy? No. The process of manufacturing and disposing of the product has to be taken into consideration as well. That's why we manufacture our Floodlight FL 11 in Germany – energy-optimized and using a clever modular concept as well as plastic-free packaging. This is how we define **Made in Germany**.

SITECO offers:

Future-proof and easy maintenance

Modules, drivers and other components can be replaced easily, some even without tools – the ideal way to make repairs or add updates in no time at all.

SITECO thinks long-term.

SITECO offers:

0 % light pollution

0% light in the upper atmosphere is our goal. And this is exactly what the Floodlight FL 11 achieves, thanks to its asymmetric light technology. To ensure a **naturally dark night sky.**

SITECO luminaires can be dimmed, activated and controlled as needed. The reduced level of light has a positive effect on the **environment and nature.**

SITECO offers:

Precise lighting control

From die-cast aluminum housings to the latest generations of LEDs equipped with special lighting technology that we developed ourselves – at SITECO, everything is designed for **long-lasting operation and significant CO₂ savings.**

SITECO offers:

Sustainable light

SITECO manufactures its products in Germany in accordance with **environmental protection regulations.** This means two things: Our transport routes don't extend halfway around the world, and our packaging contains **no plastic.**

SITECO offers:

Eco-friendly production and packaging

Savings calculation for your lighting and installation of a 4-pole system.

3t CO₂
saved per year

	Old system	New system
Luminaire type	8 x 2,000 W HQI	FL 11 maxi 917 W
Annual energy consumption kWh	8,800	3,668
Annual operating costs €	3,680	1,284
Energy	3,080	1,284
Maintenance	600	low maintenance
Annual operating savings €		-2,396

Additional savings can be realized with SITECO Connect Sports.

Reduction in operating
costs by

70%

-70 % cost savings

Up to **40 % subsidy** possible

How much money and CO₂ can you save? Do the SITECO energy-savings check now. www.siteco.com/solutions/light-audit



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