

Green grass,
green environment.

LED-technology

SGL for the
love of
grass

Sustainable technology & superior quality

Next level grass lighting

With our state-of-the-art LED-technology you are able to grow grass on any sports surface in a sustainable way. Because of its low energy use and high output, the LED grow lighting systems are extremely energy efficient. The premium LED lighting and Infrared technology, combined with a smart control system, guarantee the highest grass quality and optimal energy efficiency all year round.



Superior performance in all climates

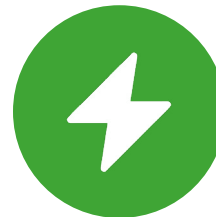
Balance is key for high quality grass growth. Every playing surface needs a different light/temperature balance. The LED grow lighting systems offer the perfect solution.

- Control light and temperature 100% independently
- Sensor based temperature control
- High light intensity & optimised spectrum
- Unrivalled light & heat uniformity for top quality



Performance guarantee

Years of research have gone into optimising our growth model for LED usage. Therefore we can 100% guarantee performance and grass quality. We calculate the lighting and temperature requirements for your desired grass quality, including expected electricity costs per year.



Sustainable & cost efficient

The limited energy consumption and optimised smart control system, combined with the long-lasting quality makes for the most efficient grow lighting technology available.

- Most efficient light spectrum
- Smart Infrared control
- Biggest lighting footprint in the industry
- Unique technology to use convection heat



State-of-the-art technology

The LED armatures, IR fixtures and control system are designed from scratch and based on a decade of research, to ensure superior performance and maximum efficiency.

PitchPro 675LED

POWER: 675 W
VOLTAGE: 400 VAC (P-P)
AMPS: 1.69 A
INRUSH: ~20 A
FREQ: 50 - 60 Hz
TEMP. AMBIENT: -10 - +50 °C

Stadium Grow Lighting B.V.
The Netherlands
www.sglssystem.com

S/N: 00600008

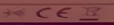


ARTICLE NR: E000148.0001
LUMINAIRE CLASS: CLASS 1

Assembled in The Netherlands

WARNINGS
- Do not obstruct airflow
- Do not clean optics with chemicals

SGL for the love of grass



Superior performance in all climates

Top quality playing surface all year round

The LED-technology offers the highest light & IR uniformity and optimal control in all climates because of individual control of light and temperature and sensor based Infrared operation.

Control light & temperature 100% independently

Grass growth is highly dependent on the balance between light and temperature. The optimal balance is different for every playing surface. Therefore, light and temperature are controlled individually on our LED grow lighting systems. The temperature sensor continuously measures the temperature at grass level. You can set your optimal temperature range and whenever the temperatures drop beneath this range, the Infrared automatically turns on. This means that at high temperatures the Infrared will not be used and you save on energy consumption, while at low temperatures additional heat can be added to achieve the same top quality.

Consistent top quality across the entire playing surface

The high uniformity of both LED light and Infrared heating, creates a very consistent growing climate. This results in consistent high-quality grass across the entire playing surface.

High intensity and optimised light spectrum

The total light spectrum that the plant uses consists of many different colours. Each colour of the light spectrum has its own effect on the development of the plant, as each colour consumes a different amount of energy. The colours of the LED light spectrum have been carefully composed based on a decade of research, to be the most effective and energy efficient. The light spectrum is optimised for both leaf and root growth, plant recovery and plant resistance, and at the same consumes as little energy as possible.

Performance guarantee

We calculate the lighting and temperature requirements for your desired grass quality, including expected electricity costs per year. We guarantee you can achieve your desired grass quality with the advice given.





Sustainable & cost efficient technology

Always use the right amount of energy

Our LED grow lighting systems are designed based on a decade of research, with quality and sustainability as top priority. The lighting and Infrared armature are designed to be the most energy efficient, and the optimised efficiency smart control system makes the LED systems the most sustainable and cost efficient grow light available.

Custom designed LED technology

Our unique LED technology has the widest light spread available. Therefore, less armatures are required and both weight and cost have been heavily reduced.

Collection and use of convection heat

Roughly 35% of the energy an LED armature uses is converted into convection heat. Convection heat warms the air around the armature and is not directed to the surface, which means this energy is wasted. Our developed LED armature collects this heat and directs it towards the surface if additional heat is needed.

Most efficient light spectrum

Each colour of the light spectrum uses a different amount of energy. After determining what colours are needed for the highest quality grass growth and the minimum required input for each colour, we concluded the most energy efficient composition is within that range. This resulted in the most effective and energy efficient light spectrum.

Custom designed Infrared technology

The Infrared armatures are designed from scratch, with a focus on uniformity and accurate temperature control. A temperature sensor continuously measures the surface temperature beneath the unit. Based on your temperature settings, the Infrared automatically radiates the right amount of Infrared to reach and maintain the set temperature. This means the Infrared is only used when necessary and no energy is wasted.

Designed from scratch

Every component of the LED units are designed from scratch, based on 12 years of agronomical and technical research, testing and customer experience. Therefore, we have been able to make the largest, most efficient LED grow light in the industry.



LED440



LED440

Highly advanced sustainable grow lighting system

The first state-of-the-art LED lighting system for growing sports grass on a 440 square meter surface in a sustainable way. Its premium LED lighting and Infrared technology, combined with a smart control system, guarantee the highest grass quality and optimal energy efficiency all year round.

Why to use the LED440?

- Improve quality of play
- Increase players safety
- Decrease ecological footprint
- Increase turnaround times during intense playing and event schedules

When to use the LED440?

Light and temperature are controlled individually on the LED440 with smart sensor-based operation, creating the perfect growing conditions in all climates:

- In winter & summer
- In shaded areas
- In case of an intense playing and/or event schedule with little time for repair

How to use the LED440?

The LED440 is ideal for treating an entire playing surface. Depending on growing conditions, only a few units are needed to treat the full surface by moving the units to a next location every 24 - 48 hours.

Technical specifications

Lighting footprint	440 square metres
Light level	340 $\mu\text{mol}/\text{m}^2/\text{s}$
Machine dimensions unfolded	L 11.4 m x W 20.1 m x H 2.8 m
Machine dimensions folded	L 11.4 m x W 2.5 m x H 2.8 m
Weight	1700 kg
Amount of LED / Infrared fixtures	52 / 48
Thermal uniformity	90%
Lighting uniformity	90%
Amount and type of electrical plugs	2 x 63 A Mennekes PowerTop (3P+N+E) 400 V
Consumption per electrical plug	57 A
Power consumption min / max	36.2 KWh / 77 KWh
Thickness cable	5 x 16 mm

LED50



LED50

The accessible LED grow light for high wear areas

The accessible LED grow lighting system perfectly suited for high wear areas.

Why use the LED50?

- Compact and easy to operate
- Superior performance in all climates
- Most effective and energy efficient light spectrum
- Independent control over light and heat
- Suitable for all grass sports playing surfaces

When to use the LED50?

The LED lighting fixtures provide a high level of the most efficient light spectrum, enabling photosynthesis on high wear areas when natural sunlight is not sufficient. Independent control of light and temperature makes that the exact amount of heat can be added when temperatures are too low for optimal grass growth. This feature ensures perfectly balanced growing conditions in all climates throughout the year, with the least possible energy input.

How to use the LED50?

Use the integrated Smart box to set the required temperature and timer for optimal performance of the lights. The SmartBox logs operational data, such as position, running hours and electricity consumption for maximum insight and control.

Technical specifications

Lighting footprint	50 square meters
Light level	345 $\mu\text{mol}/\text{m}^2/\text{s}$
Dimensions	L 9 m x W 1.9 m x H 1.5 m
Weight	395 kg
Number and types of LED fixtures	9 x SGL LED1 Advanced Pitch Light
Number and types of IR fixtures	8 x SGL IR850 PitchPro
Plug	1 x 32 A Mennekes (3P+N+E) 400 V
Consumption per electrical plug	20.5 A
Energy consumption	1 x 14.2 kW



sgsystem.com

SmartBox

Outstanding control

- High accuracy surface temperature sensor
- Sensor based Infrared operation
- 4G data transfer
- Cloud based data Portal
- Remote control
- Automatic lighting hour registration
- Automatic running cost registration
- Touch screen control box



Assist modules

Enter the full experience



Add Assist services to your LED grow lighting system for optimal performance and control at all times.

ProductConnect

Your LED grow lighting system will be connected to the Portal, to automatically register lighting hours and enable remote control. Set the timers, change temperature settings and turn the unit on and off anywhere and anytime.

Data registration

Manually log your data for better insight and accurate analyses:

- Performance measurements
- Lighting hours
- Surface usage hours
- Irrigation
- User specific input
- Precipitation
- Grass quality

Lighting Advice

Visual insight in all essential growth factors on your grass playing surface, based on the GPS location of your TurfPods. For each of the six measurements you can display a heatmap. You need at least 9 TurfPods for this upgrade.

Agronomical support

Active support from our agronomy team:

- Assigned agronomist
- Weekly interactive reports
- Annual reports
- Standby support during office hours

Growth is the key to
success.



SGL

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