



SPIRIT *Solar Powered Lighting Column*

www.solarcolumn.com *The sustainable stand alone solution*


more than masts

**SPIRIT**

Solar Powered Lighting Column

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The sustainable stand alone solution

Governments are facing the social task of providing sufficient lighting with minimum energy consumption, thereby guaranteeing the safety of public spaces. The innovative **SPiRiT** can help you with this.

- The **SPiRiT** is the most sustainable lighting solution of its kind. The lighting is based completely on solar power, which means that electricity from the grid is no longer required. In fact, in the absence of the grid the SPiRiT is a very cost effective choice for a permanent lighting solution.
- Besides being a sustainable choice, the **SPiRiT** is also exceptionally practical: a stand-alone solution that is delivered plug & play. Moreover, the **SPiRiT** can be custom-built, which ensures that there is an appropriate solution for every location and situation.

As a CO₂ neutral lighting column manufacturer, Kaal Masten has selected the most environmentally responsible materials. Moreover, only materials and product parts with a high durability are being used, guaranteeing very limited maintenance for an extensive period.

Sustainable, stand-alone and plug & play: get to know the **SPiRiT**.

SPiRiT

Stand alone

There has been a long-held desire to deliver street lighting without using electricity supplies from the grid (with the accompanying costs and work). As a stand-alone solution the **SPiRiT** meets this requirement completely, in both urban and rural areas.

The autonomous lighting system of the **SPiRiT** works on the basis of solar power and LED technology: the light source uses the stored solar power. This autonomous operation guarantees savings on your electricity costs.

This makes the **SPiRiT** ideally suited to places without an electricity grid in the vicinity, such as highways, country roads and mountain roads. Without the need to install the grid first, you are still able to secure traffic safety in restrictive circumstances.

The column will generate the required quantity of power in all circumstances. The battery capacity will allow for a three day period without sunlight; still the **SPiRiT** will produce sufficient light during night hours.



Sustainable

- With its robust high quality design, low maintenance construction and long-lasting components, the **SPiRiT** brings you the most sustainable result with the minimum environmental burden. The energy yield is high, the columns and the batteries are completely recyclable and electricity consumption has been reduced to zero. This significantly decreases the CO₂ footprint of your public lighting.

The column, produced from thermally galvanised steel, is treated in-house with a very sustainable coating system (when desired): Kaal DCC coating, which has a CO₂ free application. Furthermore, the columns are suitable for all high quality LED fixtures. This means that the **SPiRiT** is also the most sustainable choice in relation to the lighting.

The columns are delivered with vertically mounted and easy-to-clean PV panels, in-house developed electronic controlling and charging units, as well as lead crystal batteries, allowing frequent complete discharging without limiting their durability. A self-inflicted air flow through the column limits the operating temperature.



LED lighting

- Using LED technology completes the sustainable profile of the **SPiRiT**. Besides the design, this responsible choice is also supported by a long life span and a high level of environmental friendliness. Moreover, the maintenance and management costs are minimal.

Stylish look

- With its high quality materials and innovative design, the **SPiRiT** gives the surroundings a completely unique look and a distinctive identity. Furthermore, the LED light creates a pleasant atmosphere for road users. Form and function go hand in hand at the very highest level. This is the sustainable solution for the future!



Intelligent control

- The intelligent control system of the **SPIRIT** – developed in-house by Kaal Masten – ensures that the power is efficiently stored and supplied. This involved taking account of all (relevant) environmental factors: from the location of the column and the accompanying day-night rhythm to the quantity of power generated and required at any given time. The smart control system ensures that the lighting functions optimally, when and where you need it.

Modular system

- The **SPIRIT** is a modular system in which the solar units and the batteries are built in as separate modules. That means that the height of the columns and the number of pv panels and batteries can be adapted to your specifications. You can choose from almost all normal standards, up to and including heights of over 18 metres.

Kaal Masten: your support for lighting solutions

Kaal Masten is a leading, innovative producer of a broad range of steel mast types for street lighting, solar systems, camera observation, road signing, catenary and advertising purposes.

Our company is based in the Netherlands, and stands for a long tradition of European craftsmanship with processing high quality steel. We will happily function as your expert partner and work with you to come up with ideas, achieve solutions and deliver customisation.

Safe and sustainable production methods aiming at CO₂ neutrality are fully embedded in our daily operations, as well as hot dip galvanizing and quality certification based on European standards. We are renowned for our innovative solutions in solar systems, coating protection, tube pile foundation and long lifetime construction design.

Kaal Masten is a member of Hakpark, a Dutch family owned group of infrastructure companies representing a yearly turnover of approximately € 480 mln.



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ISO 9001 • ISO 14001 • OHSAS 18001 • EN 1090 • CE 40-5