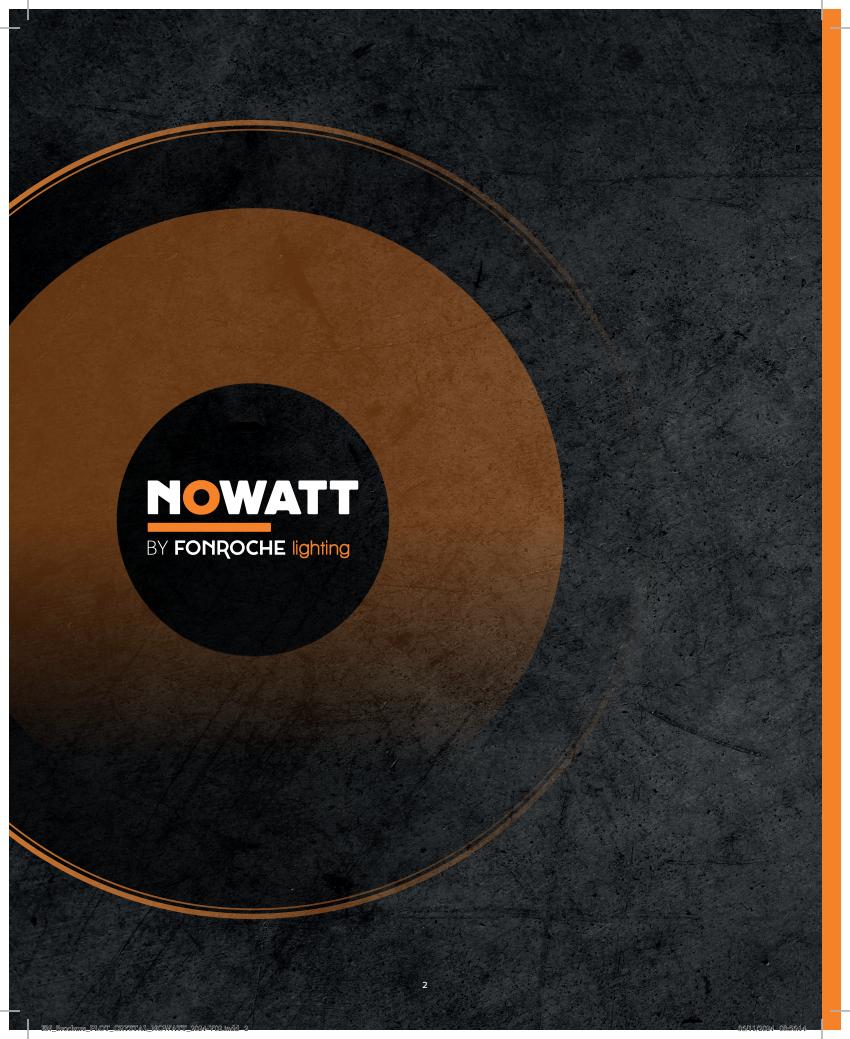


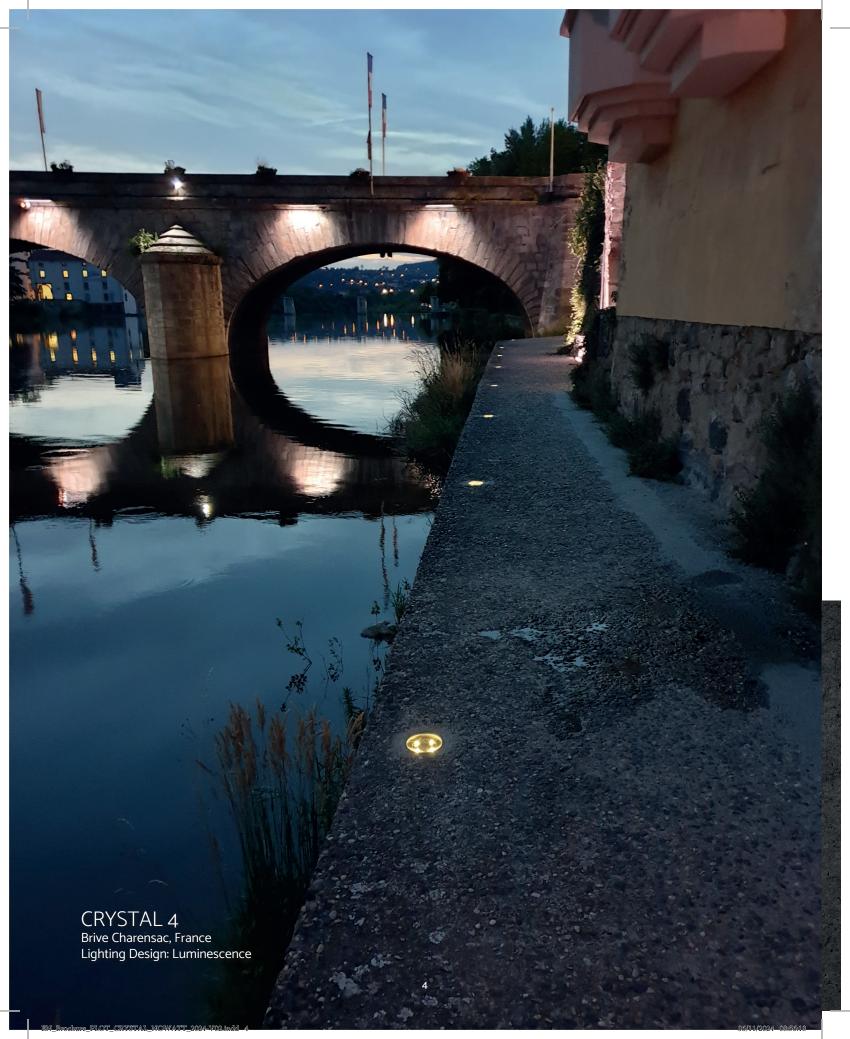
## SOLAR STUD

SIMPLE, ELEGANT, AND DURABLE



# SOLAR CRYSTAL STUD

Thanks to its autonomous operation, the Crystal solar stud is the ideal solution for illuminated marking and guidance in various applications, including path marking and highlighting heritage and architectural sites. The glass frame elegantly diffuses light while ensuring excellent solar capture. With up to 480 hours of autonomy, the Crystal stud provides reliable lighting year-round, even during winter. The Nowatt app offers extensive customization options, enabling fully tailor-made scenarios with dynamic light animations and a selection of one million colors.



## SOLAR CRYSTAL STUD

## SIMPLE, ELEGANT AND **DURABLE**

The Crystal solar stud was specifically designed to provide durable and elegant marking, while meeting the environmental expectations of cities.

Fully autonomous due to its solar operation, the Crystal stud is easy and quick to install, making it an ideal fit for projects requiring reliable, efficient, and eco-friendly lighting or the highlighting of architectural sites.

Its uniqueness lies in its high-quality glass frame, offering a distinctive aesthetic with an elegant and modern luminous effect.





## SOLAR AND AESTHETIC

Designed to blend seamlessly into any landscape, providing both functionality and visual harmony.



## ECOLOGICAL AND DURABLE

Crafted from robust, long-lasting materials and powered by renewable energy.



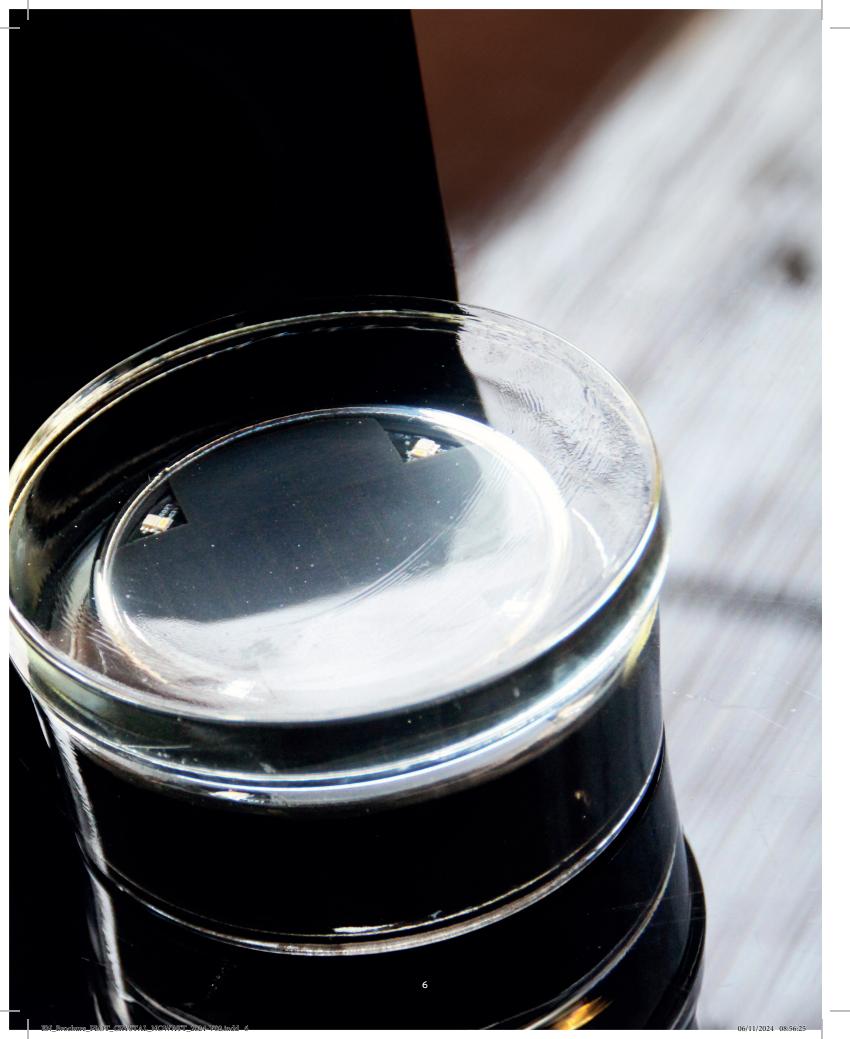
## EASY AND QUICK INSTALLATION

No cables, no trenches, no electrical cabinet.



## CUSTOMIZABLE MARKING

Programmable and controllable with the Nowatt app.



## THE **SOLAR** STUDS

#### CRYSTAL 2, 4 AND 6

- Adapts to all architectural lighting projects.
- High-performance battery: up to 35 days of autonomy without recharging.
- Elegant and modern light diffusion.
- 16 mm glass and aluminum structure compression-resistant up to 32 tons and resistant to UV aging.
- · Multiple lighting scenario options.
- Remote control and programming via Bluetooth.
- Environmentally friendly lighting, respectful of biodiversity DarkSky certified.
- Simple installation on all types of surfaces: a simple core drilling followed by sealing.
- Aligned with eco-responsible city initiatives and energy transition a solution for decarbonization.
- Customization of glass by sandblasting available as an option.





#### **CRYSTAL 2**

AMBER LED 3000 K LED 4000 K LED

Enables the diffusion of soft, uniform monochrome light.

#### **CRYSTAL 4**

**RGB LED** + WHITE 3000 K

Allows the selection of LED colors from over one million options.

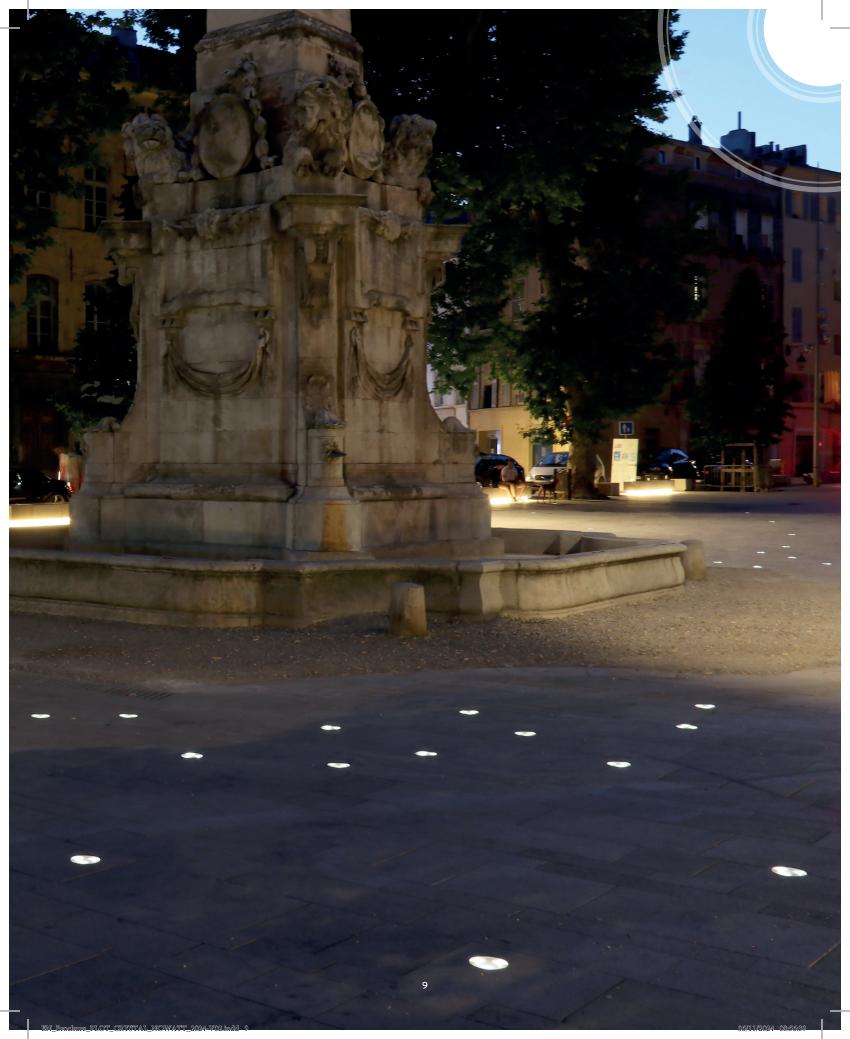
#### **CRYSTAL 6**

**RGB LED** + WHITE 3000 K

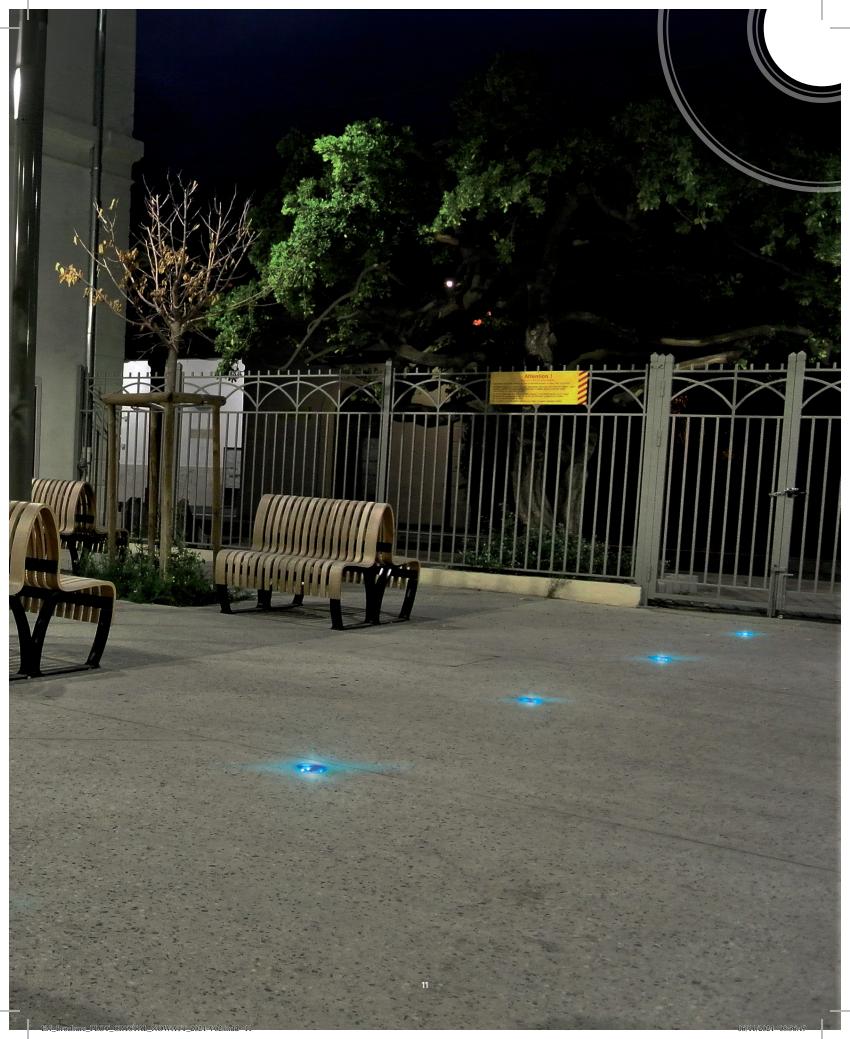
INTEGRATED **GPS** 

Integrated GPS, enabling ultraprecise calendar programming for customized lighting scenarios.











## AN AESTHETIC, DURABLE, AND **ECO-RESPONSIBLE MARKING**

With a luminous flux of less than 5 lumens, it guarantees exceptional marking quality, all while safeguarding the environment and biodiversity.



## INFINITELY CUSTOMIZABLE LIGHT

Designed by experts in solar lighting, the Crystal stud is available in three versions, providing a wide range of applications to suit any project.

The Crystal stud offers infinitely customizable lighting through tailored scenarios, a wide range of lighting colors, and calendar-based programming.

## **ARCHITECTURAI SOLAR LIGHTING**

#### **CRYSTAL 4 STUD**

The Crystal 4 stud offers 8 customizable lighting scenarios, allowing for adjustments in both duration and LED color.

SCENARIO 1: rainbow chain.



SCENARIO 2: rainbow fade.



**SCENARIO 3:** monochrome candlelight

(color of choice ).





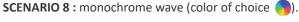
SCENARIO 5: rainbow flash (choice of number of flashes per second).



SCENARIO 6: rainbow wave.









Other scenarios available upon request.

#### **CRYSTAL 2 STUD**

The Crystal 2 stud emits white or amber light and provides the flexibility to select from 4 customizable lighting scenarios.

SCENARIO 1: monochrome (white 3000K, 4000K, or Amber).

SCENARIO 2: candlelight.



**SCENARIO 3:** monochrome wave.



SCENARIO 4: flash (choice of number of flashes per second).



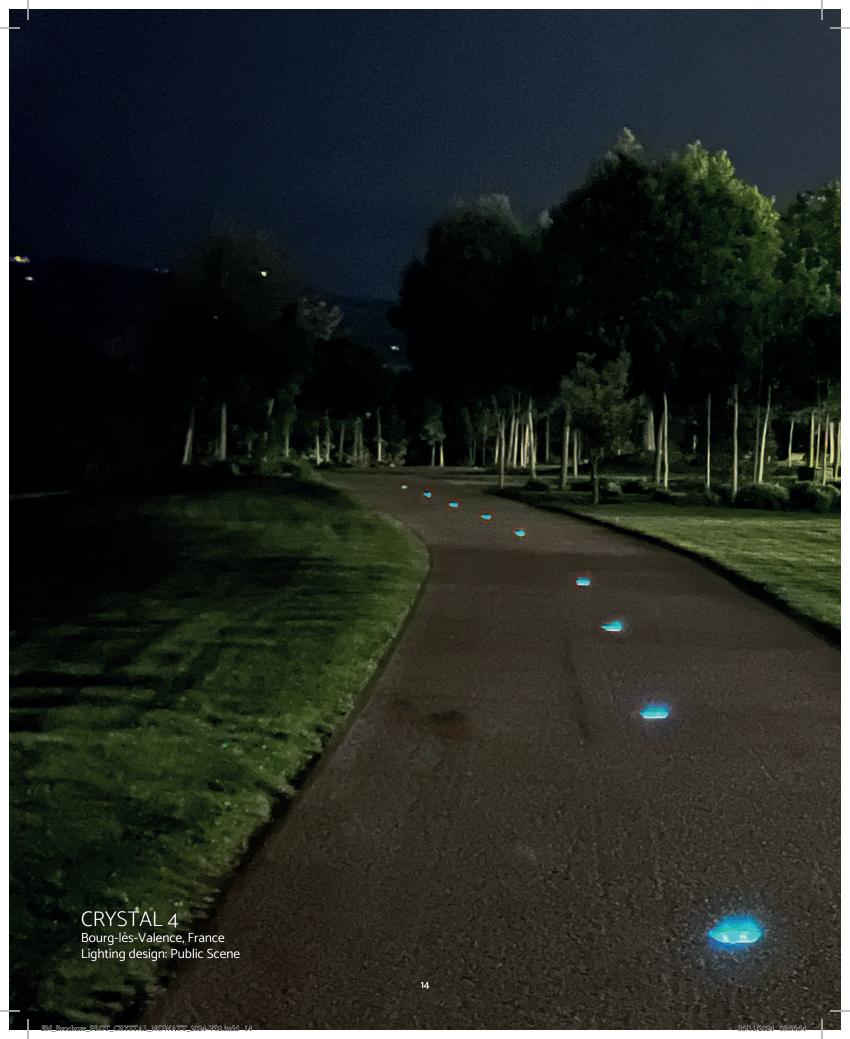
Other scenarios available upon request.

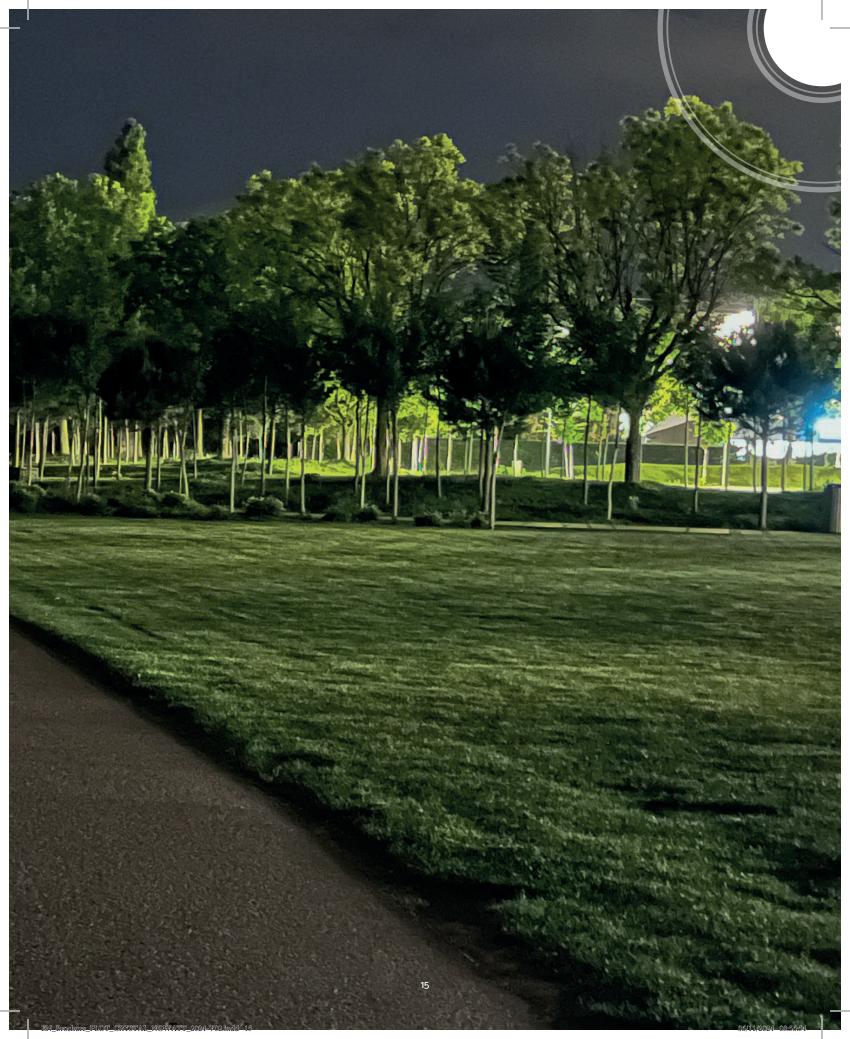
#### **CRYSTAL 6 STUD**

The Crystal 6 stud features an integrated GPS for precise, drift-free calendar functionality.

The Crystal 6 stud allows for the creation of both 'default' and 'specific' lighting scenarios.

The default scenario operates year-round (for instance, the 8 available scenarios on the Crystal 4), except on dates where a specific scenario is scheduled. Multiple custom scenarios can be set for specific dates in advance.

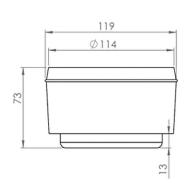




# TECHNICAL CHARACTERISTICS

#### **CRYSTAL SOLAR STUD,**

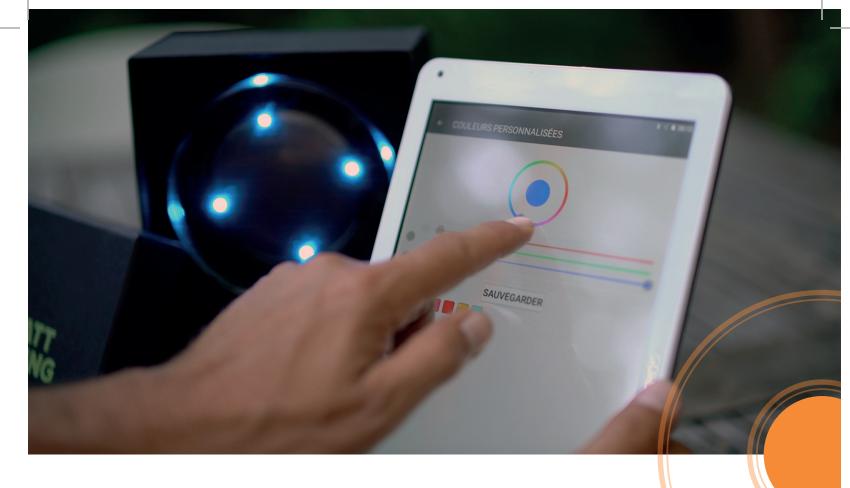
FOR DECORATIVE LIGHTING AND SOLAR MARKING







Name	CRYSTAL 2	CRYSTAL 4	CRYSTAL 6
Product reference	PLRE2	PLRE4	PLRE6
Battery	LiFePO4 (3,2 V / 4,5 Ah)	LiFePO4 (3,2 V / 4,5 Ah).	LiFePO4 (3,2 V / 4,5 Ah).
Autonomy	35 days of autonomy without recharging	35 days of autonomy without recharging	35 days of autonomy without recharging
Luminous flux	4 lm	4 lm	4 lm
LED temperature	Amber - 3000 K - 4000 K	RGBW - all possible colors	RGBW - all possible colors
Calendar programming	Not included	Not included	Included
Optical protection rating	IP67	IP67	IP67
Structure impact resistance	IK10 - Compression resistance (32 tons)	IK10 - Compression resistance (32 tons)	IK10 - Compression resistance (32 tons)
Certification	CE	CE	CE
Standards	EN62262	EN62262	EN62262
Structure	Glass (16 mm thickness) - Aluminum frame	Glass (16 mm thickness) - Aluminum frame	Glass (16 mm thickness) - Aluminum frame
Weight	1,25 kg	1,25 kg	1,25 kg



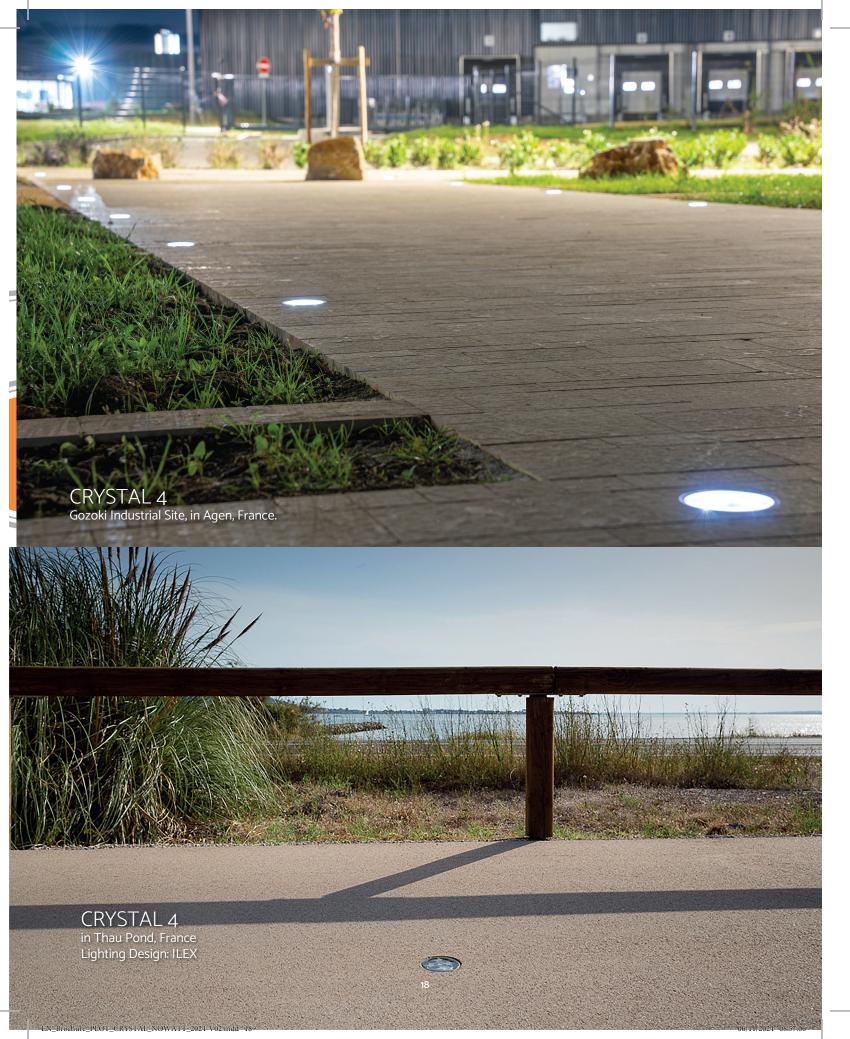
# CONTROL YOUR STUD WITH A TAP



#### THANKS TO THE **NOWATT** APP

The Nowatt app is a dedicated Bluetooth control and programming tool, available for free download on Android and iOS devices.

It allows remote customization of both the lighting scenarios and the color of your Crystal solar stud.







## DISCOVER NOWATT

Founded in 2014, Nowatt stands at the crossroads of solar and architectural lighting.

Offering a range of solar lighting, marking, and decorative lighting solutions, Nowatt's product line includes ground markers, bollards, and columns crafted from raw materials.

Nowatt designs and manufactures 100% solar-powered products that address today's aesthetic and environmental challenges.

Acquired in 2023 by Fonroche Lighting, the world leader in solar lighting, Nowatt now benefits from the expertise and technical know-how to drive the development of its product line. With thousands of solar lighting solutions deployed globally, Fonroche Lighting is at the forefront of revolutionizing the solar lighting market.

### "La Street":

#### THE WORLD'S FIRST CENTER

entirely dedicated to Solar Streetlighting, Located in Agen, FRANCE.

**OUR EXPERTISES:** 

#### A Unique Project Approach:

#### **TAILORED TO EACH STORY**

We design and customize our products and components by carefully considering the irradiance and weather conditions specific to each project.



