

# 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 highlighting in various applications, including pathway guidance and the enhancement of 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 all 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.

CRYSTAL 4 Brive Charensac, France Lighting Design: Luminescence 

## 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 thanks to its solar-powered operation, the Crystal stud is easy and quick to install, making it an ideal solution for projects requiring reliable, efficient, and eco-friendly marking or the enhancement 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, providing lighting guaranteed 365 nights a year and powered by renewable energy.



## EASY AND QUICK

No cables, no trenches, no electrical cabinet required.



#### CUSTOMIZABLE MARKING

Programmable and controllable with the Nowatt app.



## **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.
- Optional glass customization through sandblasting.



#### **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, enabling ultraprecise calendar programming for customized lighting scenarios.







CRYSTAL 4 Gare de la Ciotat, France Lighting Design: SNCF

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# FOR A SOFT AND COLORFUL MARKING

## 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.

## ARCHITECTURAL 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 4 : monochrome (color of choice 🕤).

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

SCENARIO 6 : rainbow wave.

SCENARIO 7 : monochrome flash (color of choice ) + choice of number of flashes per second).

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SCENARIO 8 : monochrome wave (color of choice 🕤).



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.

CRYSTAL 4 Bourg-lès-Valence, France Lighting design: Public Scene L



## 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                    | <b>35 days</b> 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<br>programming     | Not included                                  | Not included                                | Included                                    |
| Optical protection rating   | IP67  | IP67  | IP67  |
| Structure impact resistance | IK10 - Compression resistance<br>(32 tons)    | IK10 - Compression resistance<br>(32 tons)  | IK10 - Compression resistance<br>(32 tons)  |
| Certification               | CE  | CE  | CE  |
| Standards                   | EN62262                                       | EN62262                                     | EN62262                                     |
| Structure                   | Glass (16 mm thickness) -<br>Aluminum frame   | Glass (16 mm thickness) -<br>Aluminum frame | Glass (16 mm thickness) -<br>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.





CRYSTAL 4 in Thau Pond, France Lighting Design: ILEX





## 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 made from raw materials.

Nowatt designs and manufactures 100% solarpowered 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 foster the growth of its product line. With thousands of solar lighting solutions deployed globally, Fonroche Lighting is at the forefront of revolutionizing the solar lighting market.

#### **OUR EXPERTISES:**

#### "La Street" :

#### THE WORLD'S FIRST CENTER

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

#### A Unique Project Approach:

#### TAILORED TO EACH STORY

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





#### MORE INFORMATION AT: www.nowatt-lighting.com

#### in 🕑 🖪 🖻 BLOG

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