

ECO-160 A

SOLAR - Embedded solar studs



ECO-160 A

Presentation



Latest generation GPS solar road stud.

Thanks to its integrated GPS technology, the ECO-160 A (ALU) flush-mounted model enables all the solar road studs on the same site to flash synchronously.

Exclusive design with 2 protective hoops along the solar module. No protruding ends. Easy maintenance. Customised aluminium cover (various finishes available on request).

Curved optical module in front of the LEDs for dirt evacuation and visibility.

Applications

Roundabouts, Pedestrian crossings, Cycle paths, Roads / Expressways, Car parks, Eco-districts

Resistance



Standards



20 Joules

LED Colors



Beaconing

1 LED, 2 LED, 3 LED, 4 LED, 5 LED, 6 LED, Constant, Synchronized blinking

Customization

Aluminium cap, Anodised cap, Powder coated cap (RAL available), Polished cap, Unpolished cap

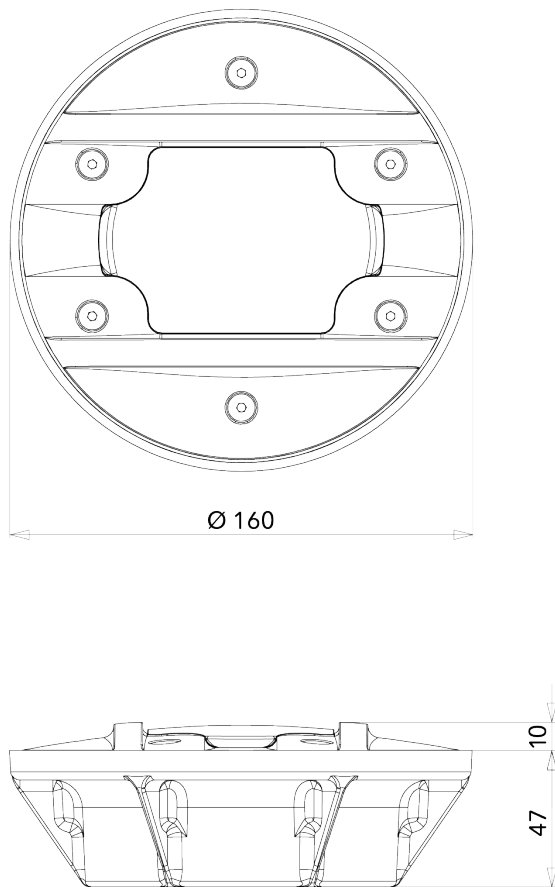
Recycling



Certifications

RoHS
COMPLIANT
2002/95/EC





Unité : mm - Tolérance +/- 0.5mm. © Eco-Innov - Tous droits réservés.

TECHNICAL CHARACTERISTICS

Dimensions and weight

Upper diameter: 160 mm.

Total height: 57 mm.

Installation depth: 47 mm.

Height above roadway: 0 mm at each end / 10 mm in the centre.

Weight: approximately 1,1 Kg.

Materials

Aluminium (cover + tank), Polycarbonate (optical module), Silicon (photovoltaic module), Recycling managed by ECOSYSTEM.

Energy storage

1. Condenser.

2. Ni-Mh accumulator. (Mandatory for GPS synchronised flashing).

Maintenance

Replacement of the solar LED module by the 6 screws of the cover.

Working temperature range

-30°C to +85°C.

Protection indices

IP 68 (watertightness).

IK 10 (impact resistance).

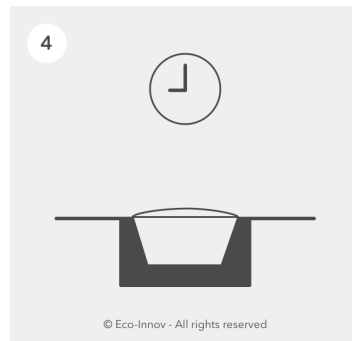
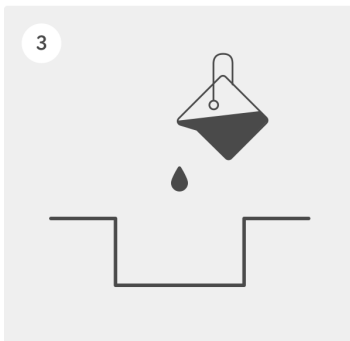
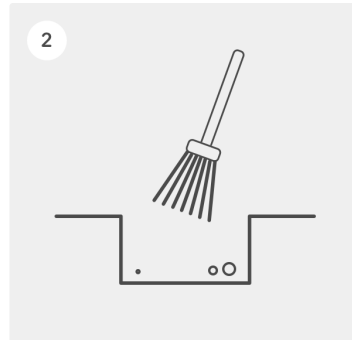
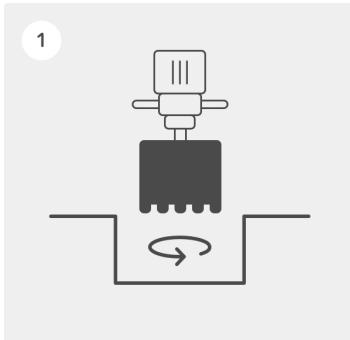
Pressure resistance

Suitable for the passage of 40-tonne trucks.

LIGHTING CHARACTERISTICS

Unidirectional or bidirectional beaconing, 1 or 3 LEDs per side. Fixed or flashing mode (2.5 flashes / second). GPS option for synchronising flashing between studs and without any wiring (1 flash per second $\pm 10\%$).

LED colours: white 2700K, white 3000K, white 4000K, white 6500K, blue, green, red, amber.

**Installation**

1 - After deciding where the studs are to be installed, drill a hole with a minimum diameter of 170 mm and 100 mm deep.

2 - Carefully brush and clean the hole to remove any dust and traces of damp that would affect the efficiency of the adhesive.

3 - Pour the appropriate bonding adhesive into the hole and insert the stud into the adhesive. Use a mallet to position the stud flush with the ground surface. Make sure the LEDs are facing the right way and are parallel to the ground. Immediately remove any residual adhesive from around the stud. If the stud is installed on a tarred concrete support, we recommend using Sikadur 30 two part epoxy adhesive. On a wooden support, we recommend using less rigid adhesives (Please contact us for further information).

4 - Place a weight on the stud until the adhesive has set (refer to the instructions).

Remark: make sure to keep the module and LEDs clean and protect them throughout these operations.

Failure to comply with these instructions may lead to the guarantee being suspended.

Lifespan and warranty

BATTERY

- a. Condenser: Average lifespan more than 10 years. 2-year warranty*
- b. Ni-Mh accumulator: Average lifespan more than 7 years. 2-year warranty*

Easy maintenance with the 6 screws of the aluminium cover without unsealing the built-in tank.

* The warranty applies in the event of the permanent cessation of the autonomous lighting system within the framework of normal use and installation in accordance with our recommendations. It consists of replacing the faulty element with an identical or equivalent item, subject to return to ECO-INNOV for analysis. On-site intervention costs are not included. Mechanical damage is not covered.

For optimal operation, we recommended to install our solar equipment on sites with good light exposure.

Recycling

ECO-INNOV is a founder member of a network that recycles professional WEEE, managed by the eco-organisation [ECOSYSTEM](#). We pay for our customers' electronic safety, lighting and regulation equipment to be collected at the end of its working life in order to meet our legal obligations and help them to meet theirs.

The unique identifier FR006801_05MBCK attesting to registration in the register of producers in the EEE sector, pursuant to article L.541-10-13 of the Environmental Code, has been assigned by ADEME to the company ECO-INNOV (SIRET 451 859 409 00026). This identifier certifies its conformity with regard to its obligation to registration in the register of producers of Electrical and Electronic Equipment and the realisation of its declarations of placing on the market with Ecosystem.

ECO-INNOV is thus one of the first producers to offer its customers a simple and free solution for collecting their professional WEEE, regardless of when it was marketed. The equipment is collected via a network of professional waste collection centres and certain wholesalers.



www.ecosystem.eco



Synchronised flashing beaconing of a pedestrian crossing. Project Management : Ville de Bernin - Photography : Jérôme Deduytsche, Utopik