SOLAR LED DRIVER SLIM

Globaltronic
spreading technology

The Solar Led Driver Slim is a complete and efficient solution for solar-powered lighting systems.

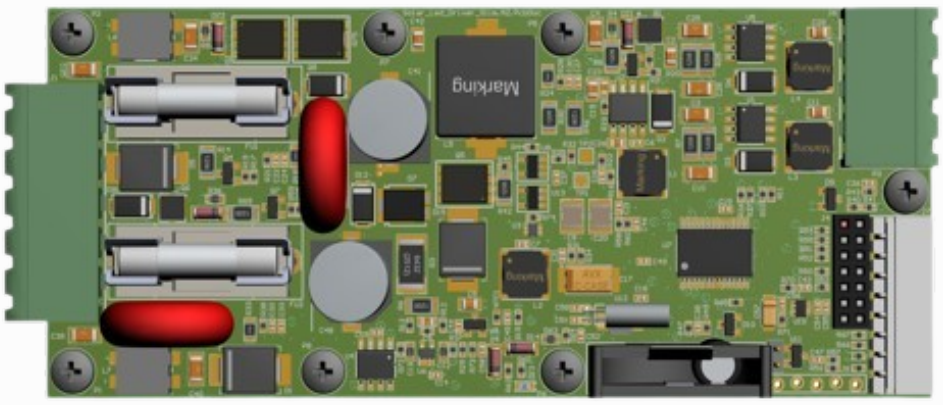
Designed to offer maximum flexibility, it combines three essential functionalities in a single device:
battery charge and discharge management, LED lighting driver, and RF communication.

It features 2 independent PWM outputs (0–100%, in 1% steps) to control LEDs up to 30V / 400 mA per channel, supporting solar panels between 12V and 35V* (maximum power of 50 to 100W). It operates in Boost mode, requiring the panel voltage to always be lower than the battery voltage. Additionally, the output voltage for the LEDs must be at least 2V below the nominal battery voltage, ensuring safe and stable system operation.

*See battery vs panel information table.

Benefits for Your City

- Real-time control and monitoring
- Consumption and luminous flux history
- Customizable and easy-to-configure time profiles
- Integrates communication technologies to increase efficiency and effectiveness
- Allows external power supply when there is no solar energy
- Possibility to connect PIR and light sensors



Main applications

Outdoor lighting

Parking lots
Public squares
Small roads
Pedestrian zones
Parks
Walking trails

version A1 | 2025 revision: 05/05/2025

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Hardware Tecnical specifications

Electrical specifications

Operating temperature (Ta)	-20ºC to 50ºC
Critical temperature	80ºC
Maximum supply voltage	48 VDC
Power supply	Battery storage of 24 VDC or 36 VDC
Load type	LED luminaire, driverless
Maximum load current	3A
Battery charging	Via MPPT
External power supply	12/24 VDC (max 3 A)
Standby power consumption	< 200 mW
Electrical class	Class I
Driver	2 outputs up to 30 V at max 400 mA (36 V version) 2 outputs up to 20 V at max 400 mA (24 V version)
Warranty	3-year warranty (typical), or otherwise as specified

Comunication

Frequency	868 MHz
Control protocols	Internal driver
Protocol	GLBT v5.5 or higher
Network type	Mesh Wireless
Transmission power	100 mW
Bit rate	57.6 Kbs

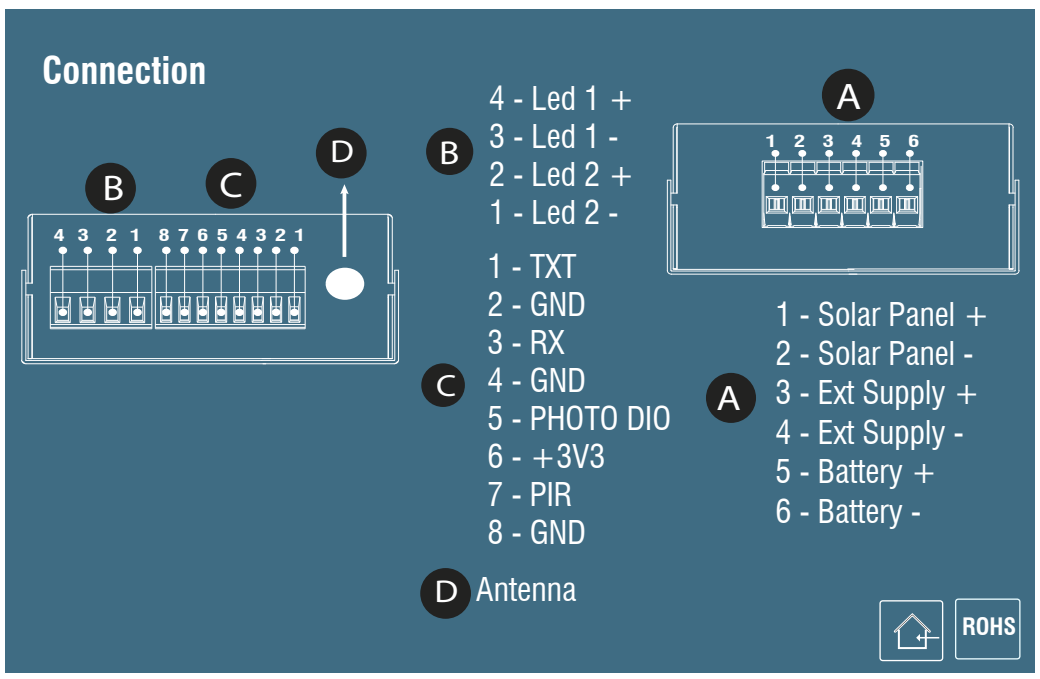
Functionalities

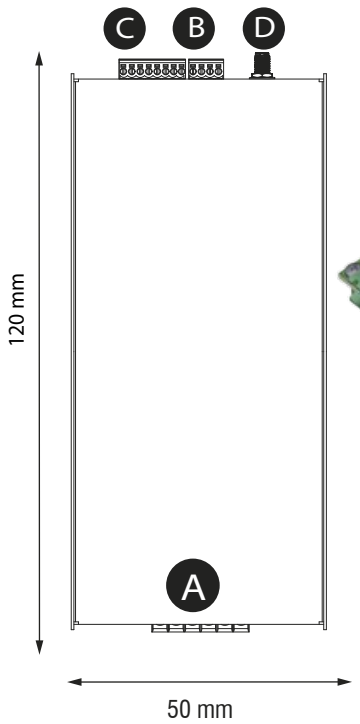
Real-time clock	15 days of autonomy with supercapacitors, or 5 years with battery
Light sensor input	Photodiode
Motion sensor input	External PIR
Temperature sensor	On board
Current sensor	On board

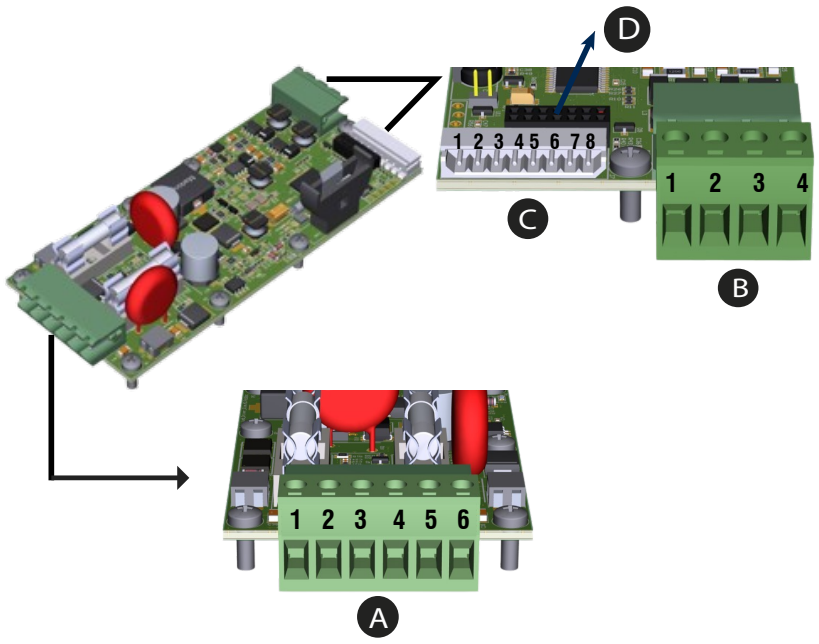
Battery vs Panel Information

Batterry	Panel
24 V	12 to 24 V (50W)
36 V	12 to 235 V (up to100W)

Tecnical drawing







Contact us and find out how this solution fits your needs

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