



# Energy Flyer

When finding a socket is impossible

## The most advanced solar USB charger in the market

MADE IN ITALY

Energy Flyer is the most advanced solar USB charger in the market. The perfect choice for people who need energy without compromises, in the most critical missions, for leisure or work.

The solar panel: four high efficiency SunPower™ cells encapsulated in a polymeric structure suited to resist impacts and weathering. A total power of more than 12 W and a special sensitiveness in low light condition.

The panel frame protects the edges and the four holes in the corners allows fixing the Energy Flyer to your backpack or on your tent.

The electronics: a MPPT charger able to maximize the solar panel power and in the meanwhile offer a stable 5V power supply via a standard USB port.

The charger is powered directly by the solar panel, even without any battery you will see its LED indicator glowing green as soon as enough light will shine on the panel face. The green light will turn red when a USB device is connected, signaling the charging status.



**SOLBIAN**  
FREEDOM POWERED BY THE SUN

MADE IN ITALY

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Giovanni Soldini said about Energy Flyer:

without being slaves  
to a power outlet or  
batteries

“Energy independence has always been one sailing’s main attractions for me, harnessing the force of nature to reach new horizons. Energy Flyer is a result of this dream: to convert sunlight into the energy we need to power our devices wherever we are, without being slaves to a power outlet or batteries.”



## Specification

Solbian Charger is a DC-DC boost converter designed to maximize the power generated by photovoltaic panels for any external condition of temperature and solar radiation intensity. Optimization of power conversion is obtained with embedded logic performing a Maximum Power Point Tracking (MPPT) algorithm on the PV module connected to the converter.

The embedded charge controller prevents battery overvoltage and overcurrent. Safety of the application is guaranteed by automatic halt of the driver in case of output overvoltage or overtemperature.

|                                      |   |
|--------------------------------------|---|
| <b>POWER</b>                         | 12.5 W                                  |
| <b>OUTPUT</b>                        | 5 V USB port                            |
| <b>MAX OUTPUT CURRENT</b>            | 2.4 A                                   |
| <b>NUMBER OF CELLS</b>               | 4                                       |
| <b>WIDTH</b>                         | 280 mm                                  |
| <b>HEIGHT</b>                        | 280 mm                                  |
| <b>THICKNESS</b>                     | 4 mm                                    |
| <b>WEIGHT</b>                        | 360 g                                   |
| <b>MPPT ALGORITHM</b>                | BOOST MPPT 4-phase interleaved topology |
| <b>PEAK EFFICIENCY</b>               | 98%                                     |
| <b>TRACKING EFFICIENCY</b>           | 98%                                     |
| <b>NIGHT CONSUMPTION<sup>1</sup></b> | 0                                       |
| <b>OPERATING TEMPERATURE</b>         | -20°C ÷ 45 °C                           |

<sup>1</sup> Electronics are powered by the solar panel and not by the battery