

SELF-ENERGY

CHARGING STATION FOR ELECTRIC VEHICLES



**WE SUPPORT E-MOTION.
EVERYWHERE.**



GIULIO BARBIERI
Special Modular Coverings

PHOTOGALLERY





TECHNICAL INFORMATION

SUPPORTING STRUCTURE FEATURES:

- Quick and easy to install. **No need for foundation work.**
- Consists of aluminum profiles, therefore **no recurrent maintenance interventions are required over time.**
- Customizable in a **wide range of colours:**

STANDARD



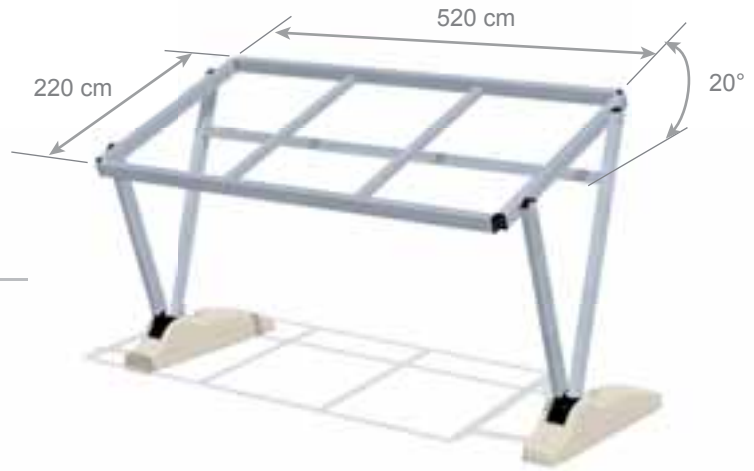
anodized silver

OUT OF STANDARD

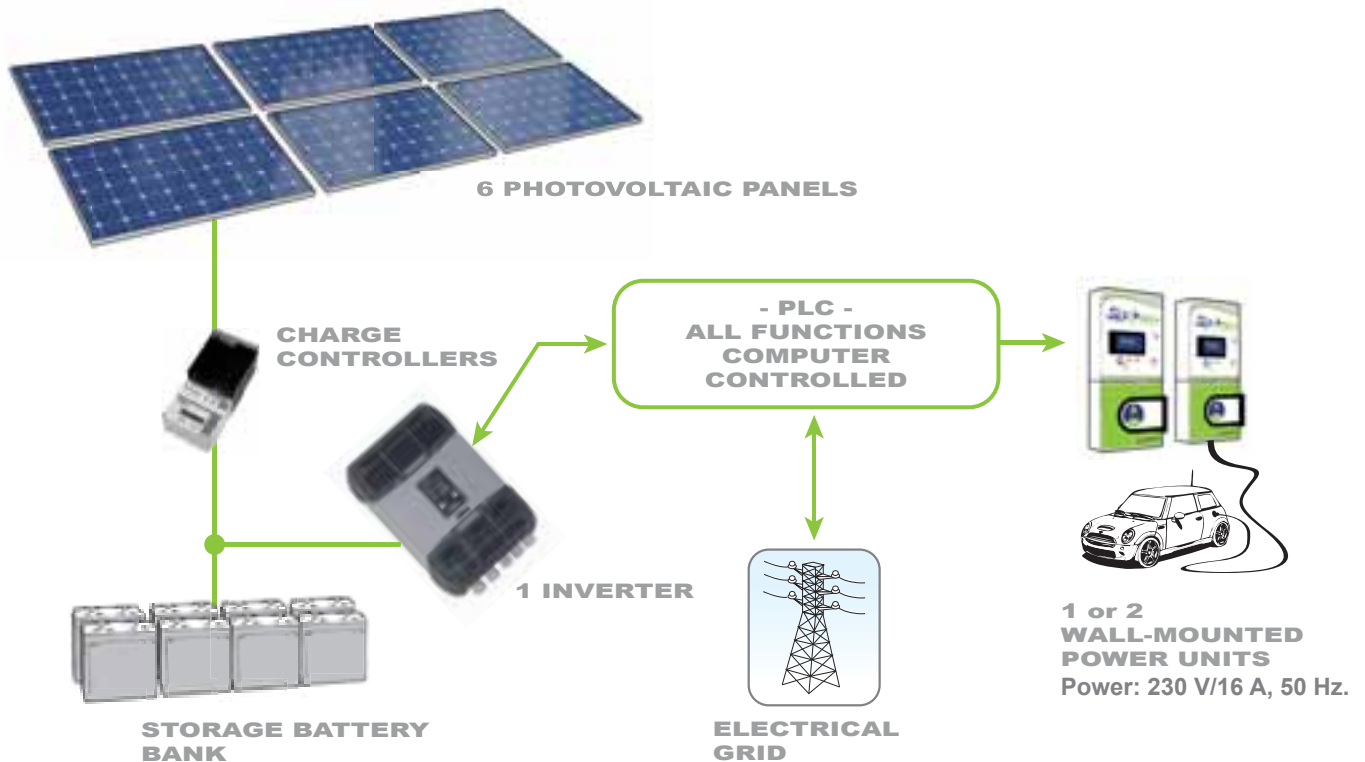


RAL range

- **Certified and under warranty.**



PHOTOVOLTAIC PLANT FEATURES:



Structure dimensions and photovoltaic plant **customized on demand.**

Electric and electronic components are stored in three different boxes specially designed for this purpose. One contains the inverter and the others the batteries. The connections among the components are carried out through **quick connectors**.



FUNCTIONING

The **charge controller** charges the batteries with the energy supplied by PV panels.

The batteries are adjusted, so that 30% of their total power corresponds to the max. energy produced by PV panels. The **inverter** takes this energy from batteries, supplying all the energy stored to consumers.

The batteries are not discharged over 30% of their capacity, to extend their life. If energy demand exceeds the one stored, customers get connected to the electrical grid.

Just in emergency situation (longer discharge of batteries) batteries might be charged by the inverter.

A Programmable Logic Controller - **PLC** - controls all the system, supervising consumer requests for power, granting or not granting supply according to the power available at the time of the request.

SPECIFICATIONS

Connection to the grid	Voltage: 230Vac monophas +/ -10%; Frequency: 50 Hz; Max. Power: 3 kW It is assumed that for a correct functioning Self-Energy must be connected to the electrical grid.
Batteries	12Vcc 145A Max. storage energy: 8x145Ax12V= 13,92 kW Max. charging current: Capacity C20 A/5= 142/5A= 28,4A; Max. charging voltage: 14,46Vcc; Max. float/maintenance charging: 13,6Vcc-13,8Vcc
Solar panels	Peak power output of each panel: 235Wp; Overall peak power output of 6 panels: 1410Wp
Charge controller	Nominal voltage: 12V, 24V, 36V, 48V selectable; Max. battery current: 45A; Max. input voltage: 150Vdc; Battery voltage range: 8-72V; Max. nominal input power: 48V, 2400W
Max. useful output power	From grid: 3 kW (limited by the grid connection); From inverter: 3,5 kW (limited by a C16 circuit breaker)

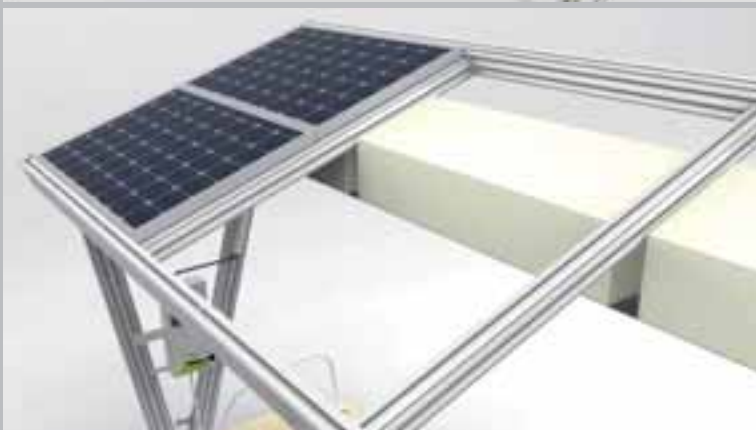
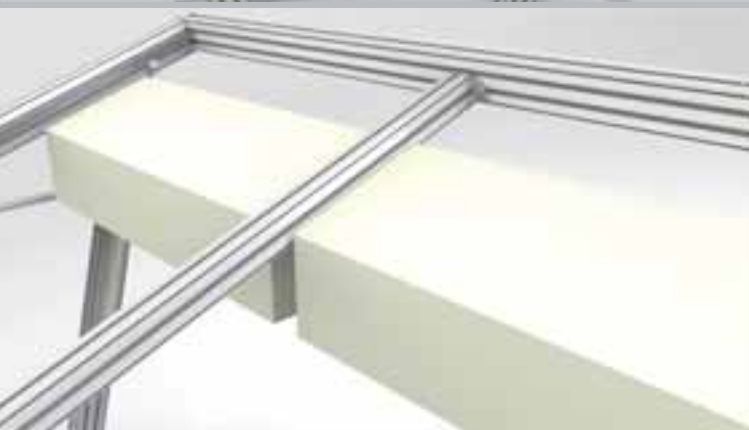
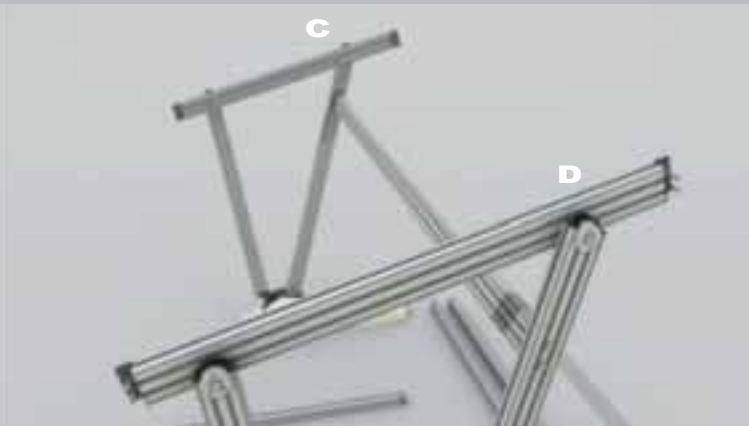
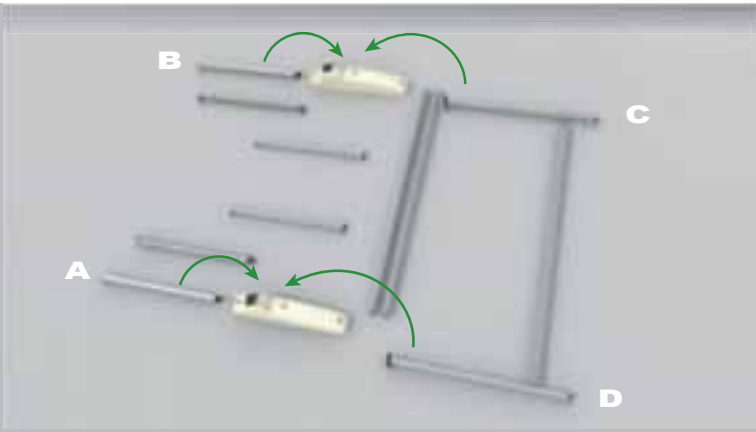
The technical specifications provided are intended to present product features and might be subject to change without notice.

ASSEMBLING SYSTEM

DISPLAY THE VIDEO ON



GIULIO BARBIERI CHANNEL



OPTIONAL WIND TURBINE
Windpower generator recommended for windy regions. Power at full capacity: 300 watt.



**FLAME RETARDANT
PVC COVERS**

Structures are complete with covers, customizable with high visual impact graphic advertisements



STRUCTURE RANGE OF COLOURS:

STANDARD

OUT OF STANDARD



anodized
silver



RAL range

OPTIONAL LED TV

Ideal solution as advertising street furniture for parking places in busy districts



PHOTOGALLERY





Discover on the internet site en.giuliobarbieri.it
all our freestanding carports made of aluminium:



**CHOOSE
OUR CARPORT
AND INSTALL THE
PV PLANT
YOU PREFER!**

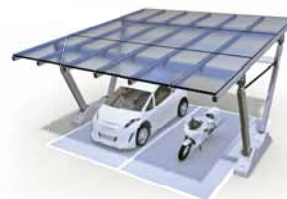
Certified aluminium carport
designed for solar panels
of any brand and model.
Installation everywhere:
no foundation works
required.



PVC covers



Solar
panels



Glass
panels

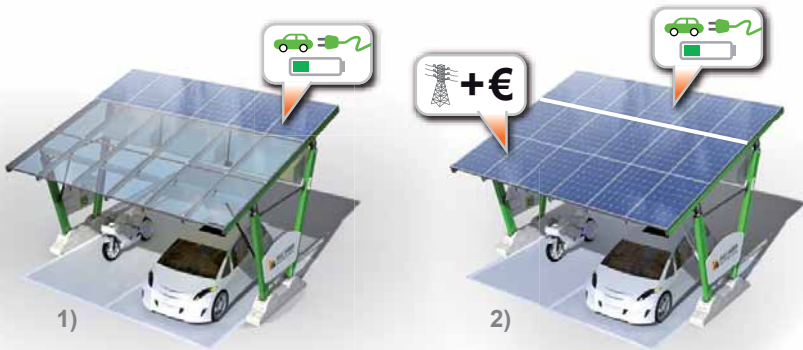


**CARPORT AVAILABLE
WITH PVC COVERS
OR GLASS PANELS**

Certified aluminium carport
designed for the installation of
any kind of rigid panels,
photovoltaic as well.
Installation everywhere:
no foundation works required.



New solutions:



EV CHARGING SOLAR CARPORT

- 1) Charging carport with PV plant for electric vehicles and with glass panels or PVC-covers.
- 2) Carport with one PV plant to charge electric vehicles and one PV plant connected to the grid for domestic use.



SOLAR BUS SHELTER

No need for foundation work and for connection to the electrical grid.

It supplies the following services:

- Charging point for mobiles, smartphones, laptops, etc.
- Wi-Fi Internet access point
- Night illumination with LED spots
- Air diffuser to cool down the air during warm periods



STAND-ALONE PV SYSTEM 4KW - 220V

Small 6ft container holding an eco-friendly system to supply energy, an alternative to electricity grid.

Components:

- charge controllers
 - inverters
 - battery bank that stores the green energy gathered by solar panels and it supplies it 24 hours a day.
- Available in 3 different version according to storage capacity (33 kW, 44 kW and 55 kW).



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