



## Autonomous Solar Electricity Generator

### “NoGrid” Solution

The new solution “NoGrid” of Solartechno Europe BV is an innovative Electrical Energy Storage system which can be directly mounted on the back of the photovoltaic module having 3 functionalities integrated all in one:

**MPPT  
Solar Charge  
Controller**



**Lithium-ion  
Battery**

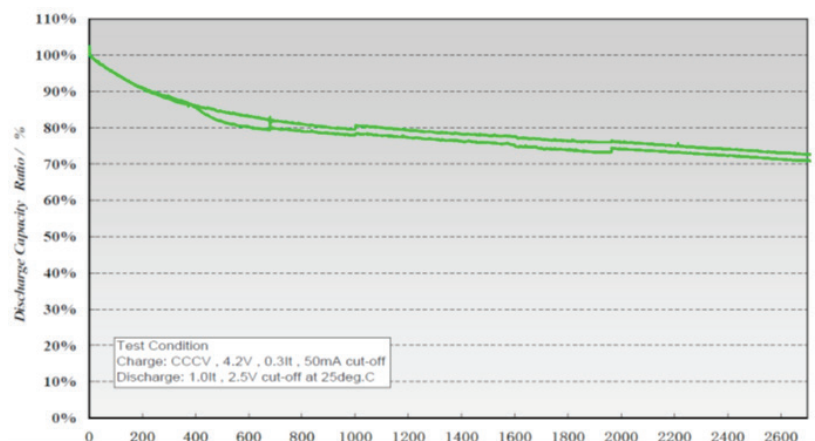


**Battery  
Management  
System**

**MODULAR DESIGN**  
**SIMPLE INSTALLATION**  
**LONG LIFE CYCLE**  
**SAFE**  
**RELIABLE**

to achieve customer needs  
standard connectors plug & play  
up to 10 years  
tested up to 55 °C  
electricity supply

### Long Battery Cycle Life



Integrated innovative cooling system able to extend the battery cycle life and avoid fast aging

Up to 10 years of cycle life with 80% DoD

Operating ambient temperature from -10 °C up to 55 °C for 5 hours continuous a day

### DC Input (PV Solar Panel)

Maximum solar module power	Up to 350 Wp
Maximum open circuit voltage *	60 Vdc
Maximum short circuit current	15 A
Operating voltage range	6 - 60 Vdc
Minimum starting voltage	6 Vdc
PV connectors	1 x MC4 plug and socket

### Battery Pack

Technology	Lithium-ion (LiNiCoAlO <sub>2</sub> )
Manufacturer	Panasonic
Capacity	1182 Wh
Depth of Discharge - DoD	Programmable on customer needs
Rated capacity at 85% DoD	1000 Wh
Nominal continuous output power	500 W
Nominal operating voltage range	43.9 - 58.1 V
Over Voltage protection	58.8 V
Under Voltage protection	43.9 V
Overload protection	12.5 A (disconnect with a 4 seconds retry rate)
Short-circuit protection	16 A (fused accessible from outside)

### System Output

Rated electrical output	48 Vdc - 10.0 A
Monitoring system	On mobile phone via bluetooth monitoring of battery state of charge and health, voltage, charging and discharging current, temperatures
Output connectors	120 Ampere 1000 Volt (for putting in parallel up to 10 NoGrid)

### Mechanical & Environment

Box dimensions (W x H x D)	620 mm x 830 mm x 45 mm
Weight	~17,5 kg (excluded solar panel and mounting braces)
Ambient temperature range	-10 °C up to 55 °C
Solar panel temperature range	-20 °C up to 85 °C
Cooling	natural convection + patented passive cooling
IP protection	IP65
Expected cycle life	10 years @: 80% DoD - 55 °C ambient temperature (for no more than 5 hours per day)
Humidity	0÷100%

### Warranties

Product warranty	5 years
Battery capacity	70% at 8 years