



Autonomous Solar Electricity Generator

“NoGrid” Solution

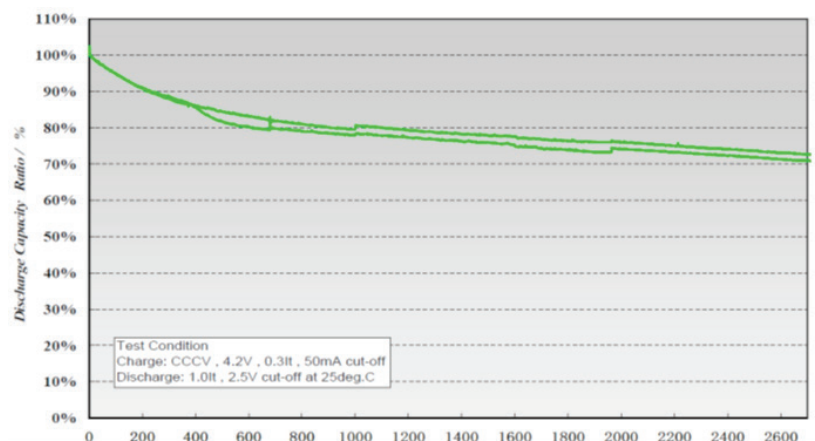
The new solution “NoGrid” of Solartechno Europe BV is an innovative Electrical Energy Storage system which can be directly mounted on the back of the photovoltaic module having 3 functionalities integrated all in one:



- 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 70% 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 ₂)
Manufacturer	Panasonic
Capacity	1182 Wh
Depth of Discharge - DoD	Programmable on customer needs
Rated capacity at 85% DoD	1000 Wh
Nominal continuous output power	1000 W
Nominal operating voltage range	43.9 - 58.1 V
Over Voltage protection	58.1 V
Under Voltage protection	43.4 V
Overload protection	22.5 A (disconnect with a 32 seconds retry rate)
Short-circuit protection	25 A (fused accessible from outside)

System Output

Rated electrical output	48 Vdc - 20.0 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 directly in parallel up to 10 NoGrid)

Mechanical & Environment

Box dimensions (W x H x D)	630 mm x 830 mm x 48 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
Cycle life	<ul style="list-style-type: none"> • 10 years @: 70% DoD - 55 °C ambient temperature (for no more than 5 hours per day) - 0÷100% humidity, with remaining capacity >70% • 7 years @: 85% DoD - 55 °C ambient temperature (for no more than 5 hours per day) - 0÷100% humidity, remaining capacity >70%

* Calculated at the coldest ambient conditions.

Preliminary Specifications. Performance may vary depending on use conditions and type of application. Solartechno Europe B.V. makes no warranty explicit or implied with this datasheet. Contents subject can change without notice.