

DATA SHEET

Island PV_1.2-3-2

Off Grid PV system - The device for storage of large quantities of electric energy consisting of powerful LiFePO4 battery pack, PV charger and DC/AC inverter.

Continuous AC output power at 25°C /non linear load	1200 VA
Continuous AC output power at 25°C / 40°C	1000/900 W
Peak power /inverter/	2400 W
Output AC voltage	230 V +/- 3%
Output frequency	50 Hz +/- 0,1%
Permanent output current	4,3 A
Operating temperature range / fan assisted cooling 48Vdc	- 25°C to + 50°C
Protection for device:	- SPD for DC input - RCD for AC output
Protection category:	PV170V/U, Up:1,2kV In: 10A, Isc: 6kA IP44/20
Dimensions:	800 x 600 x 300 mm
Weight:	approx. 70 kg
LiFePO4 Accumulator 48Vdc, type LA3016 with active BMS	2 pcs
Lifetime of the accumulator	> 4000 cycles
Energy stored in accumulators	3000 VAh
Protection: output short circuit, overload, battery voltage too high/low, temperature	
Storage time "OFF"	6 months
*) Battery charging time of PV panels / 100% capacity	4,5 // 2,5 hours
PV charger with MPPT-max.voltage(Voc) /current(Isc) /PVpower	145V /18A / 2000Wp
DC input -connectors for connecting photovoltaic panels	(-) 2 pcs / (+) 2 pcs

*) The charging time depends on the number of PV modules used in the irradiation intensity = 1000W / 1sqm for PV panels with an output of 250 Wp: for connection 1x 3 pcs PV panels it's charging time 4,5 hours // for connection 2x (1x 3) PV panels it's charging time 2,5 hours.

Run time on fully charged accumulator:

At 1A average load	13 hours
At 2A average load	6,5 hours
At 4,3A average load / max. continuous output power	3 hours

Wiring configurations for PV panels / panels are not part of the device /:

- 1 x 3 pcs of PV panels in series be connected in to the input DC1
- 2 x (1x 3) pcs of PV panels in series be connected in to the input DC1 (1x 3) & in to the input DC2 (1x 3)
- use the 60 cells multi / mono crystalline PV panels / >250 Wp **or 72 cells PV panels >270 Wp => to shorten the battery charging time**



Possibility to connect Water Pump - compatible - tested in real conditions :

Water Pump Type
Technical parameters

4" 1-PSC, maker Franklin Electric
0,37 kW / 230 V / 50 Hz
Q min./ max. 0,3/2,4 m³/h
H max./ min. 52,7/16,6 m
T max. liq. 30°C



Water Pump 4" 1-PSC, maker Franklin Electric - Datasheet:

<http://www.kkrenewableenergy.cz/en/products-/island-pv-1-2-3-2/download-datasheet/>

Warning!

Using a other water pump with other parameters => Island PV system does not work, or may cause damage to device.