SolarTank
Storage system

Singlephase/Threephase

CARATTERISTICS

Solar Tank is an intelligent electronic device which allows you to accumulate the energy in excess produced by a photovoltaic residential system and then deliver it when needed.

It consists of a double DC / DC converter comprising a charger section of photovoltaic modules with a fully programmable battery pack and of booster pack section grid tied inverter to battery.

Everything happens on the logic of information sent by a mains power sensor installed between the framework electric house and the exchange counter

FUNCTIONALITY'

Compatible with almost all the on-grid inverter with conventional MPPT and 48 V battery packs trade, allows for maximum flexibility in retrofit the components of an existing plant and the choice of new plants. Available in single-phase version and for three-phase systems up to 40 A per phase.

When Psun> Pload (by day) the batteries are single loaded the excess energy, favoring always direct the power to the loads.

When Psun <Pload (at night or cloudy) loads are powered by the energy stored in the battery to a maximum power of 1500 W.fully operational in DC.

Models	Solar Tank singlephase	Solar Tank threephase
PV input DC		
Input DC voltage (V)	150 ÷ 600	
Max input current (A)	16	
Max input power (W)	6000	
Number of input	1	
Input connession type	cable clamp screw terminal block + 1 pair MC4 connectors	
Output to inverter		
Output current (A)	10	
Output voltage (V)		
Output voltage range (V)	150 ÷ 600	
Max output power (W)	1500 (C10 suggested)	1500 totali (C10 suggested)
Output connession type	cable clamp screw terminal block + 1 pair MC4 connectors	
Output protection	extrarapid fuse 6,3x32, 10 A FF	
Input/output to battery		
Loading voltage (V)	48	
Allowed capacity (Ah)	100 ÷ 450	
Charge cycle voltage range (V)	35 ÷ 62	
Max input current (A)	30	
Charge/discharge speed	C10 (depending battery producer specification)	
Protection to battery	n. 3 fuse 6.3X32 T10AH	
Connession to battery	cable clamp screw terminal block on the board	
Operational performance		
Max efficiency	99%	
Complete charge	Deep recharge to 100% within 18hours of continuos sun	
Stand-by self consumption	100 mA - 5 W	
Enviromental Performance		
Temperature (°C)	-20 ÷ +50	
Umidity	0 ÷ 95%	
Max altitude without derating (mslm)	3000	
Derating temperature (°C)	70	
Noise (dB)	73	
Degree of protection	IP20	
Physical caratteristic		
Dimension (H x L x P)	339 x 256 x 141	
Weight (kg)	6	
Body	coated aluminum powder	
Installing method	wall bracket	
Cooling	fan + heatsink	
Sensors input		
Grip power input	n. 1 analogic input 3 x 0,5	n. 3 analogic input 3 x 0,5
Load power input	n. 1 analogic input 3 x 0,5	
Type of sensors	TA/TV sampling every 20 ms. Mac power 8000 W	
Battery temperature sensor	n. 1 input	
Communication		
Configuration/installation interface	n. 1 RS485 port	
User monitoring interface	n. 1 LAN ETHERNET Rj45 port	
Software and configuration		
Rapid configuration	n. 4 dipswitch	
Advance configuration	installer SW 1Phase	installer SW 3Phase
Instant user monitoring	user monitoring SW	
Certification		
CE	yes	
CEI-021 Conformity	yes CEI 0-21 V1 2ed.	
EMC conformity	yes	
Category of storage system	Monodirectional production side	
Warranty		
Warranty	24 month	

All data are intended for information purposes only and are subject to change without verification   V1.0EN 2016