

ENERGY STORAGE SYSTEM

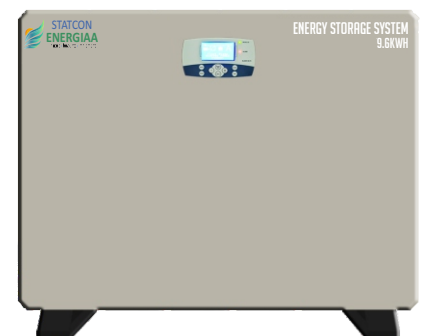
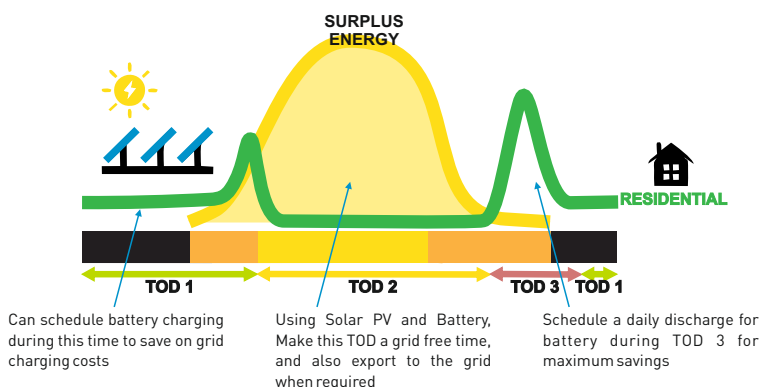
3KVA / 5KVA | LI-ION BASED



Energiaa's ESS Pegasus Li+ & Sphinx Li+ series is the new Stunning and Powerful premier segment Solar Energy Storage System for the Indian Market. A perfect combination of Energiaa's robust Hybrid inverter technology with an energy pack of upto 9.6KWhr of Li Ion battery provides enough punch to run your 1.5 T air conditioner.

It is set to revolutionise the immense domestic market, making solar accessible to every household. The grid synchronised plus storage based solar inverter promises 100% utilisation of power as compared to conventional solar PCUs.

Now you can store the electricity according to time of day and export to grid during lean load periods or when you are not at home. Run your loads on its heavy-duty inverter system and save on high electricity bills.



Scheduling Features

Controlled scheduling via keypad or PLC
Battery charging according to TOD
Programmable night saving mode



Active Front End Technology

Low distortion O/P for critical loads
Facility of Export control of power
Export excess PV power to grid through grid synchronisation



Battery Pack

Faster charging rate and low discharging rate
Is not affected by memory Effect and high temperatures
Guaranteed 2000 cycles and up to 5000 cycles at 25°C at 50% DOD



Heavy Load capacity

Runs your Air conditioner for more than 2 hours in case of a power cut
3.6 to 3.8KWH ensures that you never remain without power.
GPRS Based web monitoring available

Applications



Residences



Bank ATM



Shops



Clinics



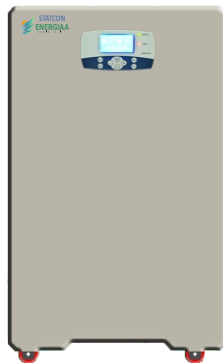
Gyms



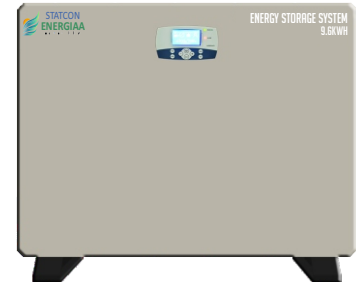
Small Offices

ENERGY STORAGE SYSTEM

3KVA / 5KVA | LI-ION BASED



ESS PEGASUS Li+ SERIES



ESS SPHINX Li+ SERIES

BATTERY PACK

Battery Type	LiFePo ₄ (LFP Type)			
Battery Capacity	3.6kWhr	4.8kWhr	7.2kWhr	9.6kWhr
Battery Voltage	48V DC			
BMS	Active BMS Inbuilt			
Max. Charge / Discharge Rate	1C Rate			

MPPT SOLAR CHARGE CONTROLLER

MPPT Topology	Buck Type			
Input PV Capacity [in KW]	Same as Inverter Capacity			
Max. Open Circuit Voltage [Voc]	185V DC			
MPPT Input Range	66-147V DC			
MPPT Efficiency	95%			

ACTIVE FRONT END INVERTER

Power Rating	3KVA 5KVA			
Inverter Type	Hybrid			
Output Voltage [Standalone Mode]	230VAC +/-2%			
Output frequency [Standalone Mode]	50Hz +/-2%			
Output Power	Same as Inverter Capacity			
Overload 60sec/30sec/5sec	110% 125% 150%			
Auto Bypass	Provided			
Grid Synchronisation	Provided			
Grid Charging	Enable / Disable (Optional)			
Export to Grid	Enable / Disable (Optional)			

GRID CHARGER

Import / Export Power	Same as Inverter Capacity			
Input Voltage	230V +10% & -20%			
Phase / Connection	1Phase / 2Wire			

USER INTERFACE

Scheduling Features	Charge Inhibit, Island mode, Export, Forced charge, Standby mode, Off			
Display Interface	Graphical LCD with back light [128x64]			
Setting Input	Membrane Keypad for Settings Input			
Battery Parameters	Voltage, Current, Cumulative Import Energy			
PV Parameters	Voltage, MPPT Charger O/P Amps, Power, Energy, Cumulative Generation			
Grid Parameters	Voltage, Frequency, Power, Power Factor, Reactive Power, Average Power, Peak Power, Cumulative Exported Energy			
Load Parameters	Voltage, Phase Current, Frequency, Power, Power Factor, Average Load, Peak Load			
System level Parameters	Mode of Operation, Active Faults, Heat Sink / IGBT temperature, System Mimic, System on / off			
LED Indications	Mains On, Alarm, Buzzer Mute			

PROTECTIONS

PV Side	Reverse Polarity, Surge Protection (Class D)			
Battery Side	Reverse Polarity, Over / Under Voltage, Current Limit, Temperature Compensation			
Grid Side	Over/ Under Voltage, Over/ Under Frequency, Surge Protection (Class D)			
Load Side	Overloads, Short circuit			
System Protection	Over Temperature trip, Breakers at all Inputs			

WARRANTY

	5 Years			
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MONITORING (OPTIONAL)

RS 485	RS-485 based monitoring showing all parameters through MODBUS			
GPRS	Easy to connect GPRS based Xenius Module for remote monitoring of all parameters (5 year data charge + sim included) as well as remote controlling			

MISCELLANEOUS

Degree of Protection	IP-21			
Environment Temperature	0 to 55° [without derating]			
Humidity	Max 95% non condensing			
Altitude	1000m above sea level			
Dimensions [all in mm]	885 * 315 * 1150		1130 * 320 * 625	
Weight [in Kgs]	114 123		187 205	

