

MAY 2024

HIGH VOLTAGE SOLAR HYBRID POWER SOLUTIONS

For C&I Applications 30KW to 500KW Range

Brands you can Trust – Experienced Teams - Energy Certainty – Investment Returns – A Greener Future



We design and install customized energy systems that Focus on your power needs

NEW BUILD PROJECTS - EXISTING SOLAR RETROFITS - POWER BACK UP

Combining Electricity and Fuel savings with Power Security

Project Application Examples

Factories for Key production and Plant equipment – Schools and Education Facilities – Hotels – IT Systems and Networks - Common Area Services in :- Buildings Lifts, Lighting, Water pumps, Fire hydrants - Warehouses for Peak TOU savings and Generator Load Replacements – Hospitals and Medical Facilities

Key Benefits of High Voltage Systems

- Improved power efficiencies reduced line losses
- Capable of covering quick demand surges from starting equipment
- Higher voltage allows lower current to be used in battery charging

- Faster Charging and discharge Rates
- Less overheating and optimal power retention in the system
- Remote Portal monitoring and reporting

About Blue Sun Energy

With its **Specialist Engineering, Electrical and Solar Installation Teams,**

Blue Sun Energy offers professional services that combine the best of breed equipment to with our experience to foster long term relationships with our clients

- Solar system design & performance team
- Accurate Power Analysis and Electrical reticulation design
- Dedicated Energy station assembly and testing workshops
- Experienced Solar Installers and Trained High Voltage Technicians
- Aftersales Service and support with workmanship warranties on all systems and equipment

Pursuit of excellence - Electrical and Solar By-Laws NRS 97, Sans, COC's, PR Eng Line Drawings

Some of Our Clients and Partners



For Further information or a quote, Please Contact James Fisher or email us at Info@bluesunenergy.co.za

PREBUILT BATTERY ENERGY STATION



Pre-assembled power packs

(up to 10 in parallel 500kw)

- 50 KW Deye Hybrid inverter
- 60 kWh Lithium power pack.
- Built in air conditioner
- Built in fire suppression
- Built in Smoke detector
- IP 55 Rated



* **R392 500 Ex VAT**

C&I Solution-1: 60KWh Energy Station



Features:

- Easy to install and deploy with large space utilization.
- Unique modular design & flexible function configuration.
- With self-use, peak shifting, forced charging & discharging and other working modes.
- Strong scalability, simple & convenient expansion on both AC and DC sides.

SPECIFICATION

Module	3060	5060
Rated voltage	614.4V	
Voltage range	556.8~662.4V	
Rated energy	60kWh	
Cycle life	6000 times	
Max.PV input power	39kW	65kW
AC rated input/output power	30kVA	50kVA
Voltage	3L/N/PE, 230/400V	
Frequency	50/60Hz	
Dimension (W*H*D)	1200*2160*750mm	
Warranty	10 years	
Expansion	Support in parallel up to 150kW/180kWh	
Protection grade	IP55	
Cooling Method	Air conditioner	
Fire protection	Fire extinguisher	
Certification	UN38.3,CE,IEC62619 ,CEI 0-21,VDE-AR-N 4105 ,IEC 62109	
Environment temperature	-30°C ~ 50 °C	

INSTALLED SYSTEM EXAMPLES



SIZE 50 KW
8 X 5.12 Deye
40KWh HV Lithium
24KWp Solar

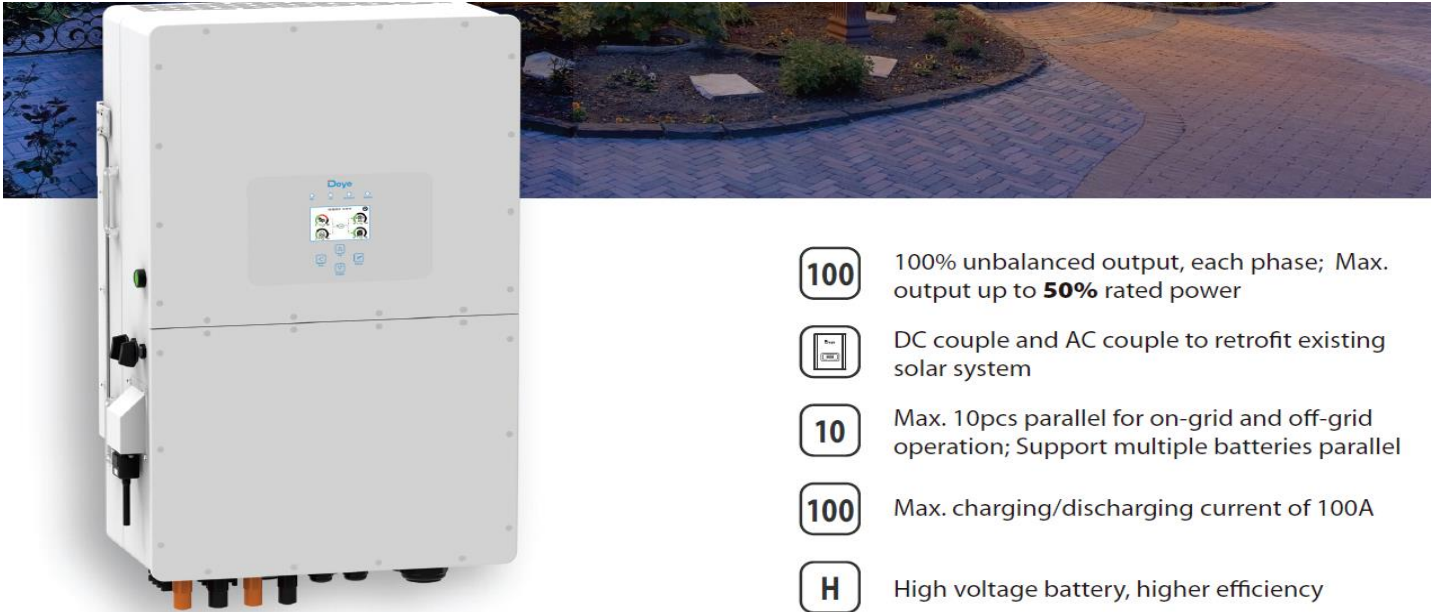


SIZE 100KW
24 X 5.12 Deye
124KWh HV Lithium
40KWp Solar





SIZE 150KW
36 X 5.12 Deye
184KWh HV Lithium
55KWp Solar

RANGE OF EQUIPMENT SPECIFICATIONS



Deye

Stock Code:605117.SH

- 100** 100% unbalanced output, each phase; Max. output up to **50%** rated power
-  DC couple and AC couple to retrofit existing solar system
- 10** Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 100** Max. charging/discharging current of 100A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

AC Output Data				
Rated AC Output and UPS Power (W)	25000	30000	40000	50000
Max. AC Output Power (W)	27500	33000	44000	55000
AC Output Rated Current (A)	37.9/36.3	45.5/43.5	60.7/58	75.8/72.5
Max. AC Current (A)	50	60	70	83.3
Max. Continuous AC Passthrough (A)	150			
Peak Power (off grid)	1.5 time of rated power, 10 S			

10 Year Warranty with Deye or Sunwoda Batteries



JA SOLAR



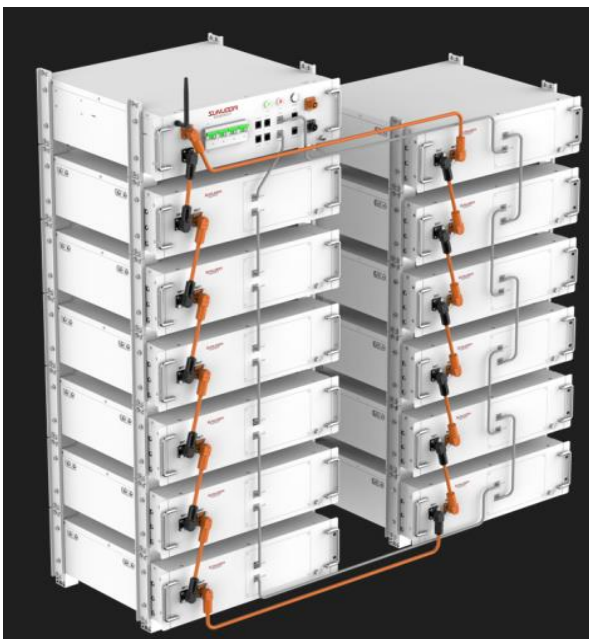
565W TIER ONE MONO SOLAR PANELS

25 Year Warranty

Installed with Schletter Solar Mounting Systems



HIGH VOLTAGE BATTERIES WITH BMS



FEATURES

- Easy to install and deploy with large space utilization;
- Unique modular design & flexible function configuration;
- Real time monitoring , remote maintenance and upgrades;
- Strong scalability, simple & convenient expansion on DC sides;



10 Year Warranty