



BATTERY ENERGY STORAGE SYSTEM CATALOGUE





About

Company

New Energy Solution is a leading manufacturer of lithium battery packs including lithium iron phosphate (LifePO4), Lithium Ion, Lithium Polymer(LiPo) battery packs. Established two years ago by a team of Engineers, we have provided our satisfied customers with battery packs with excellent safety, high energy performance and long-lasting life and received good feedback from them.

At New Energy Solution, we are revolutionizing the lithium-ion battery industry by combining cutting-edge technology with a passion for sustainability.

We're proud to offer highly differentiated Lithium Iron Phosphate and Lithium-Ion Battery Cells, Modules and Battery packs.

Last Longer, Perform Better

with New Energy Solution Lithium Ion Compact Batteries

Our Philosophy

Our motto, Challenge Your Limits, reflects our philosophy to push yourself to greatness.

We, along with our customers, live and breathe adventure and relish the opportunities that our planet provides.

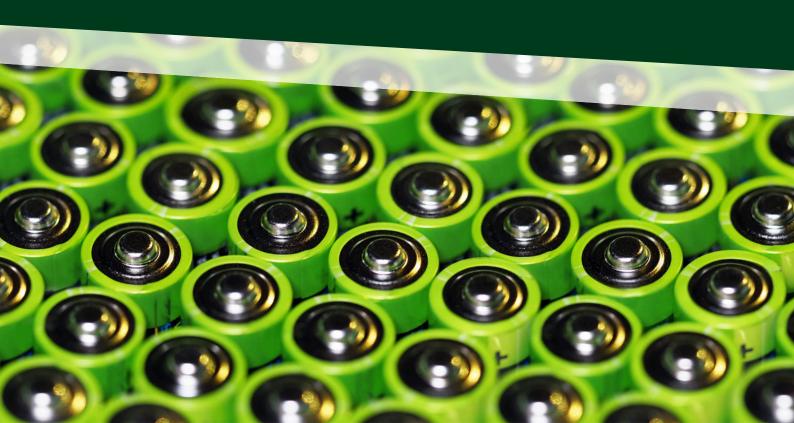
We feel it is our duty to do better as a business, making our batteries as sustainable as possible for our customers to achieve their full potential.

Our Mission

To power the world's transition to Lithium energy storage, ethically.

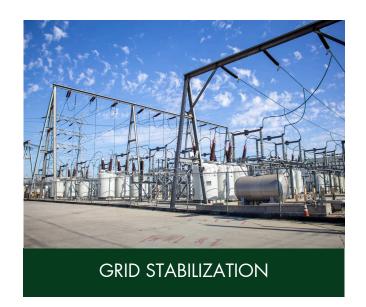
To provide energy-efficient, high-performance lithium batteries that last longer and perform better, ensuring reliability and cost-effectiveness for our customers.

To be the most sought after & admired Lithium battery company in the world by helping our customers challenge and overcome their limits





PRODUCTS FOR ANY APPLICATION



From drop-in-ready products to custom solutions, New Energy Solution lithium ion and LiFeO4 batteries are one of the most durable and reliable energy sources on the market. And combined with our solar inverter, they are perfect for powering a wide variety of solar applications such as Solar RV, Residential Solar Energy, Solar Street Lamp, Solar Power Generator, Solar Boat







(EV) CHARGING INFRASTRUCTURE

DATA SERVER SUPPORT



Why Go <u>Lithium</u> Over Lead Battery?

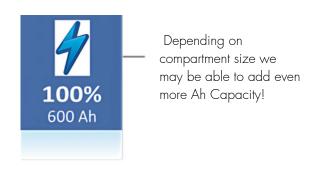
"Paid for" vs "Usable" Ah Capacity

Lead Acid Battery

**Paid for "Ah Capacity **Capacity after lift Interrupt threshold **Remaining "Usable" Ah capacity after heat loss during use, charging or cooling. Voltage drops, heat issues, memory effect can further reduce Ah capacity as the battery gets older

You pay for 1000 Ah You get 600 Ah

Lithium Phospate Battery



You pay for 600 Ah You get 600 Ah

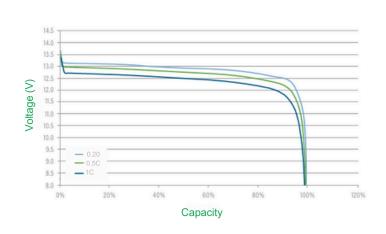
Lithium vs. Lead-Acid Comparison

FEATURE	LEAD-ACID	LiFePO4	
Cycle Life	300 - 400	3,500	
Max Usable Capacity	50%	85%	
Discharge Efficiency	50-90%	99%	
Maintenance	High	None	
Charge Time	6 - 12 Hours	1 - 5 Hours	
Partial Charging Capable	No	Yes	
Weight Comparison	100%	50%	
Charge Efficiency	80%	99%	
Cost	₹	₹₹₹	

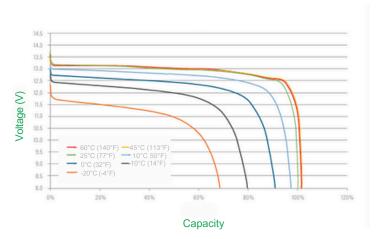


<u>Lithium Iron Phosphate</u> <u>Characteristics</u>

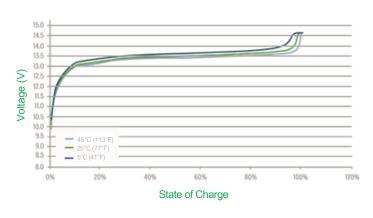
DISCHARGE VOLTAGE CHARACTERISTICS at VARIOUS RATES 25°C (77°F)



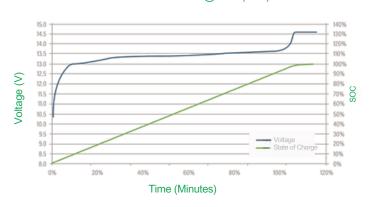
DISCHARGE VOLTAGE CHARACTERISTICS AT VARIOUS TEMPERATURES DISCHARGE 1C

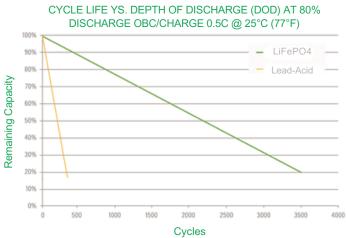


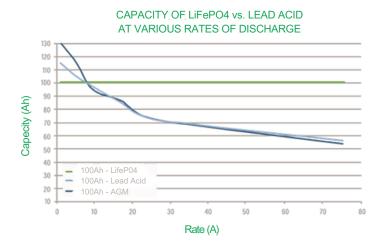
CHARGE VOLTAGE CHARACTERISTICS AT VARIOUS RATES
CHARGE 0.2C



CHARNIE VOLTAGE AND STATE OF CHAINE (SOC) CHANGE 0.20 @ 25°C (77°F)







^{*}Performance between applications and batteries may vary. All results should be independently verified by customer.



Why Pay More For <u>LIFEPO4?</u>



MORE USABLE CAPACITY

Lithium batteries allow you to use 100% of their capacity, regardless of the rate of discharge.



LONGER LIFE

lithium batteries provide up to 10 times longer life than lead-acid batteries, and they still provide 80% of rated capacity after 3,500 cycles.



LOW SELF CHARGE

Partial charging does not affect performance quality or battery life. A low self-discharge rate means worry free storage so even occasional users can be assured of reliable performance.



CONSTANT POWER

Full power available throughout discharge. Voltage does not drop like lead-acid.



ECO-FRIENDLY AND SAFE

No gassing, no fumes and no pollution. Enjoy reliable power, while protecting the environment, using these non hazardous batteries.



LIGHTER WEIGHT

50-60% less weight than lead-acid equivalent.



MAINTENANCE-FREE

Plug, play and charge. No watering.



TEMPERATURE TOLERANCE

2.5X more efficient operation at low temperatures. Safely operational up to 149°F (65°C).



INSTALLATION FLEXIBILITY

Can be installed upright or on its side





ESS RACK LOW VOLTAGE ENERGY STORAGE







- Standardized Design: Our 3U And 4U Standardized Case Ensures Broad Applicability.
- Enhanced Energy Capacity: Support Multiple Parallel Battery Usage To Meet High Energy Demands.
- Intelligent Lithium Battery Management System: Equipped With RS485 Communication, Offers Real-Time Battery Monitoring And Customizable Protec on Parameters Such As Charge & Discharge.
- Balancing: Automatic Collection Of Battery Single Series Voltage, Pressure Difference Up To 30 Mega
 Volt (Can Be Set) With An Automatic Start Equalization Function.
- Warning Function: Advanced Warning Functions, Including Overcharge, Over-Discharge, Over-Current, High-Temperature, And Low-Temperature Alerts, Reducing Potential Safety Risks.

Model	51.2V 100Ah	51.2V200Ah	51.2 V 300Ah	51.2 V 400Ah	51.2V 500Ah
Array Mode	16S	16S*2	16S*3	16S*4	16S*5
Nominal Energy (Kwh)	5.12	10.24	15.36	20.48	25.6
Nominal Voltage (V)	51.2	51.2	51.2	51.2	51.2
Charge voltage (V)	57.6	57.6	57.6	57.6	57.6
Discharge Cutoff volt (V)	48	48	48	48	48
Charging Current	30	60	90	120	150
Max Charge (A)	50	100	150	200	250
Max discharging (A)	100	200	300	400	500
Cycle Life	6000Times@80%DOD,25 degree Celsius				
Communication Mode	RS485/CAN				
Operating temperature	Charging 0-60, Discharging -10-60 degree celsius				
Size (LxWxH) (mm)	440*170*560	440*245*670	440*320*780	440*395*910	440*475*1035
Net weight (kg)	44	95	155	225	322





ESS RACK HIGH VOLTAGE ENERGY STORAGE







- Standardized Design: Our 3U And 4U Standardized Case Ensures Broad Applicability.
- Enhanced Energy Capacity: Support Multiple Parallel Battery Usage To Meet High Energy Demands.
- Intelligent Lithium Battery Management System: Equipped With RS485 Communication, Offers Real-Time Battery Monitoring And Customizable Protec on Parameters Such As Charge & Discharge.
- Balancing: Automatic Collection Of Battery Single Series Voltage, Pressure Difference Up To 30 Mega
 Volt (Can Be Set) With An Automatic Start Equalization Function.
- Warning Function: Advanced Warning Functions, Including Overcharge, Over-Discharge, Over-Current, High-Temperature, And Low-Temperature Alerts, Reducing Potential Safety Risks.

Model	192 V 100Ah	240 V 100Ah	288 V 100Ah	336 V 100Ah	384V 100Ah
Array Mode	4	5	6	7	8
Nominal Energy (Kwh)	19.2	24	28.8	33.6	38.4
Nominal Voltage (V)	192	240	288	336	384
Charge voltage (V)	233.6	292	350.4	408.8	467.5
Discharge Cutoff voltage (V)	160	200	240	280	320
Charging Current (A)	30				
Max Charge (A)	50				
Max discharging (A)	100				
Cycle Life	6000Times@80%DOD,25 degree Celsius				
Communication Mode	RS485/CAN				
Operating temperature	Charging 0-60, Discharging -10-60 degree celsius				
Size (LxWxH) (mm)	574*395*970	574*395*1037	574*395*1310	574*395*1471	574*395*1638
Net weight (kg)	166	205	244	283	322





SINGLE PHASE HYBRID SOLAR INVERTER





- Our Solar Hybrid Inverter is a next-generation energy solution designed with advanced technology for maximum efficiency and compactness. It seamlessly integrates solar power, battery storage, and grid supply, offering unparalleled performance and energy reliability for residential, commercial, and industrial applications.
- Equipped with intelligent battery communication, this
 inverter ensures optimal charging, discharging, and
 monitoring of battery health, enhancing the overall lifespan
 and efficiency of your energy storage system. With its
 sleek design, innovative features, and eco-friendly
 operation, our Solar Hybrid Inverter is the perfect choice
 for a sustainable energy future.

Model/Description	3 kW	6 kW	10 kW	
Rated output power	3000	6000	10000	
PV DC voltage	360/550	360/550	360/550	
Feeding voltage	120	120	120	
MPPT VItg range	60- 300	120-450	120-450	
No of MPPT Tracker	1 /27 A	1 /27A	1 /27A	
AC Voltage range	90-280VAC/170-280VAC	90-280VAC/170-280 VAC	90-280VAC/170-2 80VAC	
Max AC Input Current(A)	40	40	40	
Grid Output Voltage	184V-265VAC/195-253V	184V-265VAC/195-2 53V	184V-265VAC/195 -253V	
Output Voltage(V)	230	230	230	
Waveform	Pure Sinewave	Pure Sinewave	Pure Sinewave	
Efficiency	93%	93%	93%	
Battery voltage(V)	48	48	48	
Max AC current(A)	100	100	100	
Max solar charge current	100amps	100amps	100amps	
Dimension(L*W*H) (mm)	110*288*390	119*313*422	153*420*462	
Operating	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C	
Weight(kg)	7.5	12	18	





THREE PHASE HYBRID SOLAR INVERTER





- Our Solar Hybrid Inverter is a next-generation energy solution designed with advanced technology for maximum efficiency and compactness. It seamlessly integrates solar power, battery storage, and grid supply, offering unparalleled performance and energy reliability for residential, commercial, and industrial applications.
- Equipped with intelligent battery communication, this
 inverter ensures optimal charging, discharging, and
 monitoring of battery health, enhancing the overall lifespan
 and efficiency of your energy storage system. With its
 sleek design, innovative features, and eco-friendly
 operation, our Solar Hybrid Inverter is the perfect choice
 for a sustainable energy future.

Model/Description	12 kW	15 kW	20 kW	
Rated output power	12000	15000	20000	
PV DC voltage	360/550	360/550	360/550	
Feeding voltage	120	120	120	
MPPT VItg range	120- 450	120-450	120-450	
No of MPPT Tracker	1 /30 A	1 /30A	1 /30A	
AC Voltage range	90-280VAC/170-280VAC	90-280VAC/170-280 VAC	90-280VAC/170-2 80VAC	
Max AC Input Current(A)	40	40	45	
Grid Output Voltage	184V-265VAC/195-253V	184V-265VAC/195-2 53V	184V-265VAC/195 -253V	
Output Voltage(V)	230	230	230	
Waveform	Pure Sinewave	Pure Sinewave	Pure Sinewave	
Efficiency	95%	95%	95%	
Battery voltage(V)	48	48	48	
Max AC current(A)	120	120	120	
Max solar charge current	120amps	120amps	120amps	
Dimension(L*W*H) (mm)	204*427*523	249*471* 562	279*501*605	
Operating	-10°C to 50°C	-10°C to 50°C	-40°C to 50°C	
Weight(kg)	22	27	36	





LITHIUM BATTERIES







MODEL	VOLTAGE (V)	CAPACITY (AH)	ENERGY (Wh)	MAXIMUM DISCHARGE CURRENT(A)	DIMENSION (mm)	WEIGHT (kg)
48/100	51.2	100	5120	100	400*340*130	41
48/200	51.2	200	10240	200	568*420*173	82
48/300	51.2	300	15360	300	680*560*200	123
48/400	51.2	400	20480	400	730*608*280	165
120/100	121.6	100	12000	100	950*340*130	97
120/200	121.6	200	24000	200	1349*410*173	195
120/300	121.6	300	36000	300	1615*560*200	292
192/100	192	100	19200	100	1500*340*130	154
240/100	240	100	24000	100	1900*340*130	192
288/100	288	100	28000	100	2250*340*130	231
336/100	336	100	33600	100	2650*340*130	267
384 /100	384	100	38400	100	3000*340*130	307

- We don't list all our model here, please contact our sales for other model.
- · Size of the battery may vary.
- A battery can be customized to meet the specific requirements of the customer.



THE FEATURES THAT MAKE NEW ENERGY SOLUTION BATTERY SUPERIOR!!!



EASY INSTALLATION

New Energy Solution lithium batteries can be installed upright or on their side allowing for flexible installation and easier configuration.



SCALABLE SYSTEM

New Energy Solutionbatteries offer freedom and flexibility by utilizing parallel connections, so you can scale your system to provide increased power and energy as needed.



INTELLIGENT COOLING

New Energy Solution uses a carefully engineered cooling management system to quickly remove heat from inside the battery during conditions of high discharge and recharge currents. This prevents overheating of critical components and extends the life of the battery



SUPERSMART BMS

The robust battery management system features a combined total of 48 charge and discharge MOFSETs that control current flow in and out of the battery, along with multilayer protective devices that prevent over/under voltage, current and temperature conditions. The multilayer protection allows New Energy Solution batteries to pass stringent UL safety standards.



ROBUST COMMUNICATION

CAN bus connections allow batteries to communicate real-time operating statistics like the voltage, current, state of charge and state of health, making New Energy Solution batteries more user friendly. Plus, all batteries feature a sleep and pulse recovery operation mode to conserve power



Service 01



CUSTOMIZED SOLUTIONS

Service 02



BATTERY TESTING

Service 03



SYSTEM INTEGRATION

Service 04



TECHNICAL SUPPORT

Service 05



ENERGY CONSULTATION

Service 06



MAINTENANCE PLANS



Client Testimonials

EnerTech UPS Pvt Ltd, Pirangut, Pune "We bought New Energy Solution wall mount inverter with inbuilt battery. We were very happy with the manner and professionalism in which the project was undertaken especially as the installation was carried out in a very high production period for the site."

Kaushik Deshpande (CEO)

PowerTech Energy Solutions,bhosari, Pune "I recently purchased a battery from New Energy Solution and was blown away by their exceptional customer service. The staff was knowledgeable, friendly, and went above and beyond to help me find the perfect battery for my needs. I highly recommend New Energy Solution for anyone looking for quality products and outstanding service."

SWAPNIL GAIKWAD (Energy Efficiency and Safety Consulting)

Prosumers Solar Pvt Ltd,Wakad Pune "New Energy Solution makes going solar easy. They provide straightforward facts about the best system for your needs without a big sales pitch. Their professional team addresses all your concerns and is clearly knowledgeable."

Virendra Bhagwat (Co Founder)

Sanjay Electricals, Pune " We were wowed with the benefits of Li-ion, and New Energy Solution batteries totally met our expectations." Sanjay Jain (CEO)

Urja Vision, Pune

"We had an extremely pleasant experience with them. Simple, responsive, informative, and brilliantly executed. Highly recommended if you are shopping for solar."

Sujith Kannoth (Director)

Oriana Power Limited,Delhi "New Energy Solution did everything they said they would do, within the timeline they proposed. There were no surprises or addons to deal with, which I greatly appreciated. Responses to my questions/concerns was always ,timely, and professional."

Arvind Kr Sharma (General Manager Business Development)

Grandway traders, Delhi "Very happy to work with New Energy Solution. I am getting all the required support from the company to serve my customer in a better way. The product quality is perfect and after sales service is worth appreciating."

Vaibhhav Sethi(CEO)



Get In Touch

Last Longer, Perform Better

with New Energy Solution Lithium Compact Batteries

Contact Us:



+91-7875504566



enquiry.ness@gmail.com



www.reallygreatsite.com



VISIT OUR SITE



Plot 70, behind Hotel Shriman Garden, Shewalewadi, Pune, Maharashtra-412307