



LITHIUM BATTERIES

Eco Friendly
Low Weight
High Performance
Fast Charge
Greater Life Cycle
Maximum Protection BMS
High Energy Density





Lithium: I Have More Power !



LITHIUM
BATTERIES

ABOUT US:

We, at ELECTROWATT ENERGIES, provide the trusted and perfect solution for the requirements in solar power generation, lithium ion battery solutions, led lighting and manufacturing (OEM/ODM/contract manufacturing).

Homogeneity in brightness, no degradation in brightness, highest possible luminous efficacy in the industry, high level durability of electronic circuits and drivers, perfect color temperature, accurate color rendering index, chromaticity co-ordinate match as per application, LM80 certified chips, thermal and optical properties optimized suitably, optical losses minimized to the lowest level, required thermal conductivity matching enclosures ensure the best solutions in led products.

High drain current capable lithium ion cells, properly balanced battery management system, suitable protections and cutoff voltages, perfect depth of discharge as per application, least internal resistance cells, impedance matching in complete batch, perfect current retention property, cell health monitoring by cell balancing, proper choice of cell chemistry for application suitability makes us confident about our growth in lithium ion battery pack market.

Highest efficacy solar cells selection, increased number of bus bars, stable solar cells, large factor, no degradation cells, 25+ years functional life pv panels, high grade raw material, least losses, mechanically stable, environmental effect resistant and unity power factor based multiple MPPT equipped ON grid and OFF grid power conditioning units, optimization of losses, phase reversal protection, no load/ over load/ short circuit/ surge/ lightening protection, dc/ac isolation, safety and protection provided as per global standards, uv resistant least losses incorporating cables, ip65 certified junction box and waterproof cabling are few features making us successful in providing highly reliable installations with assured performance guarantee.



LITHIUM BATTERIES

We offer lithium ion battery solutions for Electric Vehicle (EV), Energy Storage System (ESS) & all types of applications. These batteries are assembled using Best quality, precisely sorted & Fine graded Lithium cells suitable for specific applications.

High charge retention capacity, globally certified cells, constant-accurate-highly responsive BMS make our batteries durable & long lasting.

BMS (Built in Protections Available)

- 1) Over Charge Protection
- 2) Deep Discharge Protection
- 3) Cell Balancing
- 4) Short Circuit Protection
- 5) Over Current Protection
- 6) Reverse polarity Protection

Our Products

- ✓ **Lithium Ion Batteries**
- ✓ **Lithium Ferrous Phosphate (LiFePO4) Batteries**
- ✓ **LiPO Batteries**
- ✓ **Lithium Cells**
- ✓ **Lithium Battery Chargers**





ELECTROWATT Lithium Batteries are extensively used in various Solar lighting application such as - Solar Street Light system, High Mast Lights, Emergency Lights, Garden Lights, All In one Lights, Outdoor Lights.

Chemistry : Lithium Ion, LiFePO4
Voltage Ranges : 11.1v. 12.8V. 14.8V. 25.9V, 25.6V
AH Ranges : Lithium Ion all AH multiple of 2Ah, 2.2Ah., 2.6Ah: From 2Ah to 150AH
 LiFePO4 all Ah multiple of 6Ah : From 6Ah to 150AH

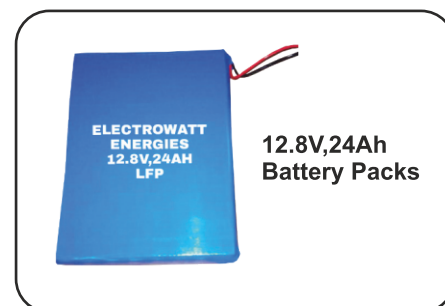
Lithium Ferrous Phosphate (LiFePO4) Battery Packs

MODEL	RATED VOLTAGE (V)	RATED CAPACITY(Ah)	CHEMISTRY	ENERGY (Wh)	DIMENSIONS (mm)
EE-LF4S1P60	12.8	6	LiFePO4	76.8	Customized
EE-LF4S2P60	12.8	12	LiFePO4	153.6	Customized
EE-LF4S2P60	12.8	18	LiFePO4	230.4	Customized
EE-LF4S4P60	12.8	24	LiFePO4	307.2	Customized
EE-LF4S5P60	12.8	30	LiFePO4	384	Customized
EE-LF4S6P60	12.8	36	LiFePO4	460.8	Customized
EE-LF4S8P60	12.8	48	LiFePO4	614.4	Customized
EE-LF4S13P60	12.8	78	LiFePO4	998.4	Customized
EE-LF4S17P60	12.8	102	LiFePO4	1305.6	Customized

* Batteries are customizable as per application

Packing Type: : Soft pack / FRP Packing

Cycle Life : More than 1500times @80% DOD



PRODUCT RANGE: Based on the application and use, we provide a full range of lithium battery products:

Lithium ion (Li-ion) Battery Pack

MODEL	RATED VOLTAGE (V)	RATED CAPACITY(Ah)	CHEMISTRY	ENERGY (Wh)	DIMENSIONS (mm)
EE-LI3S3P22	11.1V	6.6	Li- ion	73.26	Customized
EE-LI3S4P22	11.1V	8.8	Li- ion	97.68	Customized
EE-LI3S6P20	11.1V	12	Li- ion	133.2	Customized
EE-LI3S7P22	11.1V	15.4	Li- ion	170.94	Customized
EE-LI3S9P20	11.1V	18	Li- ion	199.8	Customized
EE-LI3S10P20	11.1V	20	Li- ion	222	Customized
EE-LI4S3P20	14.8V	6	Li- ion	88.8	Customized
EE-LI4S5P20	14.8V	10	Li- ion	148	Customized
EE-LI4S10P20	14.8V	20	Li- ion	296	Customized

* Batteries are customizable as per application

Packing Type: : Soft pack / FRP Packing

Cycle Life : More than 600times @80% DOD



Solar LANTERN / POS Machine / PORTABLE DEVICES Battery



ELECTROWATT Lithium Battery widely used in **SOLAR LANTERN** portable devices such as POS Machine ,Hand Held Terminal (HHT)s, Ticketing Systems, Thermal Printers, Portable electronic gadgets, GPS devices, Kiosk, Mobile power bank, alcohol detection device for police, DS devices etc. 7.4V, 6.4V and 3.7 V batteries majorly used for these application Lithium Battery Chargers



MODEL	RATED VOLTAGE (V)	RATED CAPACITY(Ah)	CHEMISTRY	ENERGY (Wh)	DIMENSIONS (mm)
EE-LI1S1P22	3.7	2.2	Li- ion	8.14	Customized
EE-LI1S2P22	3.7	4.4	Li- ion	16.28	Customized
EE-LI2S1P22	7.4	2.2	Li- ion	16.28	Customized
EE-LI2S1P25	7.4	2.5	Li- ion	18.5	Customized
EE-LI2S1P29	7.4	2.9	Li- ion	21.46	Customized
EE-LF2S1P60	6.4	6	LiFePO4	38.4	Customized

* Batteries are customizable as per application

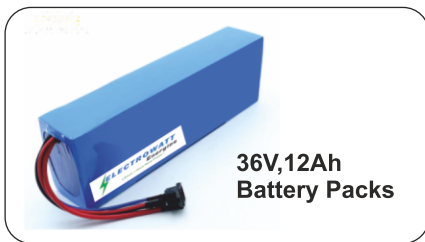
ELECTRIC VEHICLE BATTERIES

A grade high performance EV batteries of low & high voltage ratings being assembled under skilled expert staff supervision.

Lithium ion (NMC), Lithium Ferrous Phosphate (Life PO4) Batteries with accurate rating, life cycle 3C discharge rate, BIS certified cells with high charge-retention.



CUSTOMIZED BATTERY PACKS FOR E-BICYCLE



Lithium Ferrous Phosphate (LiFePO4) Battery Packs

MODEL	RATED VOLTAGE (V)	RATED CAPACITY(Ah)	CHEMISTRY	ENERGY (Wh)	DIMENSIONS (mm)
EE-LF8S2P60	24	12	LFP	288	Customized
EE-LF8S3P60	24	18	LFP	432	Customized
EE-LF8S8P60	24	24	LFP	576	Customized
EE-LF12S2P60	36	12	LFP	432	Customized
EE-LF12S4P60	36	24	LFP	864	Customized
EE-LF12S5P60	36	30	LFP	1080	Customized
EE-LF12S6P60	36	36	LFP	1296	Customized
EE-LF12S7P60	36	42	LFP	1512	Customized

* Batteries are customizable as per application

Lithium ion (Li-ion) Battery Pack

MODEL	RATED VOLTAGE (V)	RATED CAPACITY(Ah)	CHEMISTRY	ENERGY (Wh)	DIMENSIONS (mm)
EE-LI7S4P26	24	10.4	Li-ion	249.6	Customized
EE-LI7S5P26	24	13	Li-ion	312	Customized
EE-LI7S8P26	24	20.8	Li-ion	499.2	Customized
EE-LI10S4P26	36	10.4	Li-ion	374.4	Customized
EE-LI10S8P26	36	20.8	Li-ion	748.8	Customized

* Batteries are customizable as per application

CUSTOMIZED BATTERY PACKS FOR ELECTRIC VEHICLES (E-SCOOTER ,E BIKE BATTERY):



60V,30Ah
Battery Pack



72V,30Ah
Battery Pack



Lithium Ferrous Phosphate (LiFePO4) Battery Packs

MODEL	RATED VOLTAGE (V)	RATED CAPACITY(Ah)	CHEMISTRY	ENERGY (Wh)	DIMENSIONS (mm)
EE-LF15S4P60	48	24	LFP	1152	Customized
EE-LF15S5P60	48	30	LFP	1440	Customized
EE-LF15S6P60	48	36	LFP	1728	Customized
EE-LF15S7P60	48	48	LFP	2304	Customized
EE-LF19S4P60	60	24	LFP	1440	Customized
EE-LF19S5P60	60	30	LFP	1800	Customized
EE-LF19S6P60	60	36	LFP	2160	Customized
EE-LF23S5P60	72	30	LFP	2160	Customized
EE-LF23S7P60	72	42	LFP	3024	Customized

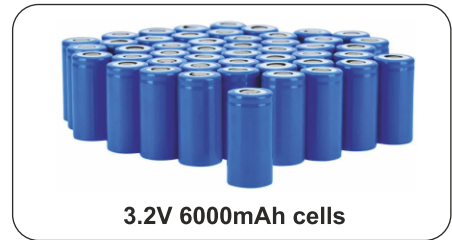
* Batteries are customizable as per application

Lithium ion (Li-ion) Battery Pack

MODEL	RATED VOLTAGE (V)	RATED CAPACITY(Ah)	CHEMISTRY	ENERGY (Wh)	DIMENSIONS (mm)
EE-LI13S9P26	48	24	Li- ion	1152	Customized
EE-LI13S10P26	48	26	Li- ion	1248	Customized
EE-LI13S12P26	48	30	Li- ion	1440	Customized
EE-LI16S9P26	60	24	Li- ion	1440	Customized
EE-LI16S10P26	60	26	Li- ion	1560	Customized
EE-LI16S13P26	60	34	Li- ion	2040	Customized
EE-LI19S9P26	72	24	Li- ion	1728	Customized
EE-LI19S15P26	72	40	Li- ion	2880	Customized

* Batteries are customizable as per application

Lithium Ferrous Phosphate Cells (LiFePO4)



3.2V Cylindrical

MODEL	VOLTAGE	CAPACITY	PACKAGE	DIMENSIONS	WEIGHT	DISCHARGE CURRENT RATE
EE-LF30	3.2 V	3000 mAh	26650	18.0mm(Diameter) *65.0 mm(height)	80 gms	1 C
EE-LI32	3.2 V	3200 mAh	26650	18.0mm(Diameter) *65.0 mm(height)	85 gms	1 C
EE-LI50	3.2 V	5000 mAh	32650	18.0mm(Diameter) *65.0 mm(height)	148 gms	3 C
EE-LI60	3.2 V	6000 mAh	32650	18.0mm(Diameter) *65.0 mm(height)	148 gms	3 C

3.2V Prismatic

MODEL	VOLTAGE	CAPACITY	PACKAGE	DIMENSIONS	WEIGHT
EE-LF10P	3.2 V	10 Ah	Rectangular	135*18*80 mm	330 gms
EE-LF20P	3.2 V	20Ah	Rectangular	103*41*165 mm	880 gms
EE-LF50P	3.2 V	50Ah	Rectangular	152*50*186 mm	1930 gms
EE-LF80P	3.2 V	80Ah	Rectangular	229*33*137 mm	2950 gms
EE-LF100P	3.2 V	100Ah	Rectangular	163*53*276 mm	3400 gms

Lithium Ion Cells (Li-Ion)



MODEL	VOLTAGE	CAPACITY	PACKAGE	DIMENSIONS	WEIGHT	DISCHARGE CURRENT RATE
EE-LI15	3.7 V	1500 mAh	18650	18.0mm(Diameter) *65.0 mm(height)	37 gms	1 C
EE-LI18	3.7 V	1800 mAh	18650	18.0mm(Diameter) *65.0 mm(height)	40 gms	1 C
EE-LI20	3.7 V	2000 mAh	18650	18.0mm(Diameter) *65.0 mm(height)	43.5 gms	1 C
EE-LI22	3.7 V	2200 mAh	18650	18.0mm(Diameter) *65.0 mm(height)	45 gms	3 C
EE-LI25	3.7 V	2500 mAh	18650	18.0mm(Diameter) *65.0 mm(height)	46 gms	3 C
EE-LI26	3.7 V	2600 mAh	18650	18.0mm(Diameter) *65.0 mm(height)	48 gms	3 C
EE-LI29	3.7 V	2900 mAh	18650	18.0mm(Diameter) *65.0 mm(height)	50 gms	3 C

LITHIUM BATTERY CHARGER



THESE CHARGERS ARE DESIGNED FOR LITHIUM CHEMISTRY WITH CCCV CHARGING FUNCTION.



Sr. No.	Pack Model	Voltage (V)	Capacity (Ah)
1	EE-CG24V2	24	2
2	EE-CG24V5	24	5
3	EE-CG36V5	36	5
4	EE-CG48V5	48	5
5	EE-CG48V5	48	10
6	EE-CG60V10	60	10
7	EE-CG72V10	72	10

* Customized ratings also available

ADVANTAGES OF LITHIUM

Fast & Efficient Charging

LifeP04 batteries can be "fast" charged to 100% of capacity. Unlike with lead acid, there is no need for an absorption phase to get the final 20% stored. This can save you hours of generator run time. And, if your charger is powerful enough, lithium batteries can also be charged Instant fast. If you can provide enough charging amps you can actually fully charge a lithium-ion battery just 20 minutes!

High Efficiency

Lead acid batteries are less efficient at strong power than lithium-ion batteries. Lithium batteries charge at nearly 100% efficiency, compared to the 85 % efficiency of most lead acid batteries.

Least Maintenance

Theoretically, lithium batteries should be fair maintenance free. An occasional "balancing" process to make sure all the cells in a battery bank are equally charged maybe called for, but a well designed energy management system should (ideally) do this automatically.

Size & Weight Advantages





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