



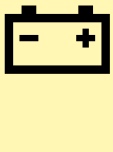
# Pure Energy

LiFePo4 Cells & Batteries

# Differences Between Different Types Of Batteries

	Lead Acid	NI - Cd	NI - MH	LI - ion	LI - Poly	LiFe
Voltage	2V	1.2V	1.2V	3.6 - 3.7V	3.6 - 3.7V	3.2V
Energy Density (Wh/Kg)	35	45	70	167	110	100
Cycle Life	400	500-1000	400-1000	300-1000	300-1000	>2000
Life (Yrs) <small>One Charge/day</small>	1	2	2	1+	1+	5
Self Discharge Rate (%/mo)	10%	30%	30%	3%	3%	3%
Charging Time	8 hrs	1.5 hrs	4 hrs	2 - 6 hrs	2 - 6 hrs	1 - 3 hrs
Safety	No BMS	Good	Good	Pood	Average	Good
High Temp Performance	Good	Good	Good	Average	Average	Good
ColdTemp (0°F) Charge	Good	Fair	Fair	0 - 45°C	0 - 45°C	0 - 45°C
ColdTemp (0°F) Discharge	Good	Good	Pood	Avg-Good	Avg-Good	Good
Memory Effect	No	Yes	Little	No	No	No

## USP



Direct replacement for lead acid batteries



Fast charging. Can be charged in 1 hour.

Optional LCD indicator. Can support RS 232 & RS 485 communication.



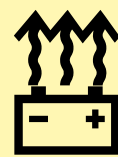
Internal cell balance & built in integrated BMS (battery monitoring software) for long life.

> 2000 life cycles at 80% DOD.

**Longer Cycle Life:** Offers up to 20 times longer cycle life and five times longer float/ calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.



Less self discharge



No thermal runaway

No explosion & no hazardous chemicals, superior safety: Lithium iron phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.



Very light weight. Lighter weight: about 40% of the weight of a comparable lead acid battery. A 'drop in' replacement for lead acid batteries.



Can make customised models .



Higher power: Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.



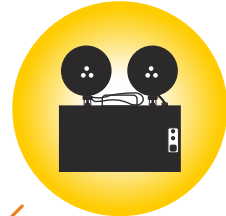
Operating Temperature Range: -10°C~55°C



Less space required.



**Telecom  
Backup Storage**



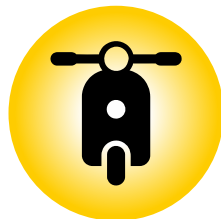
**Emergency  
Backup System :  
Home UPS / Lift UPS**



**Power  
Station**



**e-Rickshaw**



**e-Vehicles :  
Battery Operated car / Forklift**



**Online UPS  
Systems**



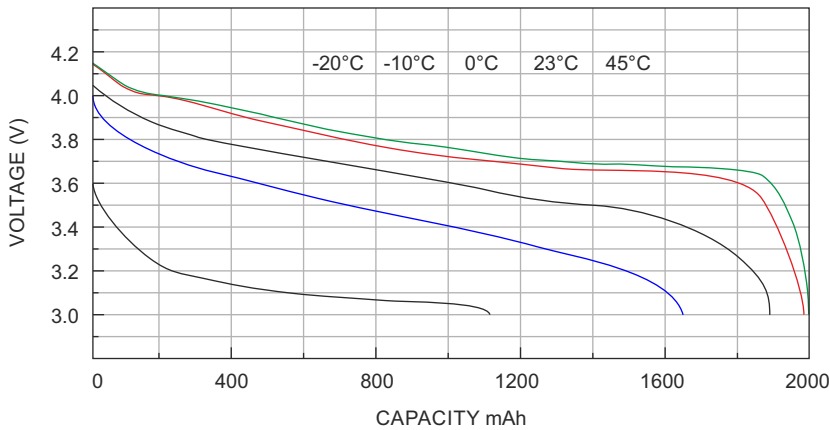
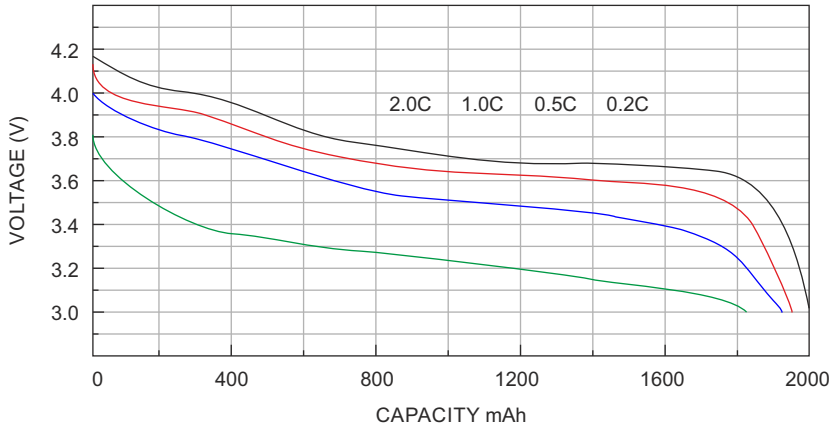
**Solar and Wind  
Energy Storage**



**Electric  
Power Tool / Medical Equipment / Toys**



## Technical Charts



## Battery Packs Specifications

S.No.	Battery type	Nominal Voltage (V)	Nominal capacity (Ah)	Continuous discharge current (Amp)	Peak discharge current (Amp)	Max Charging current (Amp)	Life (cycles)	Discharge cutoff v	Charge cutoff v	Operating temp
1	LiFePo4	12.8	50	50	100	50	2000	8	14.6	-20 TO 70DEG
2	LiFePo4	12.8	80	80	160	80	2000	8	14.6	-20 TO 70DEG
3	LiFePo4	12.8	120	120	240	120	2000	8	14.6	-20 TO 70DEG
4	LiFePo4	25.6	80	80	160	80	2000	16	29.2	-20 TO 70DEG
5	LiFePo4	25.6	120	120	240	120	2000	16	29.2	-20 TO 70DEG
6	LiFePo4	48	60	60	120	60	2000	30	54.75	-20 TO 70DEG
7	LiFePo4	48	80	80	160	80	2000	30	54.75	-20 TO 70DEG
8	LiFePo4	73.6	42	42	84	42	2000	44	80.3	-20 TO 70DEG
9	LiFePo4	73.6	84	84	168	84	2000	44	80.3	-20 TO 70DEG
10	LiFePo4	73.6	102	102	204	102	2000	44	80.3	-20 TO 70DEG

Note: Batteries can be customised to any capacity.



Specifications subject to change due to continuous technical upgradation.

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