



# LDP 24-50 (25.6V 50Ah)

lithium iron phosphate (LiFePO4) battery

**Your best power choice  
for energy storage system!**

 Bluetooth Monitoring



VT Batteries LiFePO4 solutions are more advanced, highly efficient and has many advantages over the traditional Lead Acid technology.

Here introducing popular LDP 24-50 battery of VT Batteries which is high demanding among different industry users for its most advanced features.

## Application

- Wheel chair, sweeper, electric vehicle, robot
- Solar/wind energy storage system
- UPS Backup power
- Telecommunication
- Medical equipment
- Solar Street light

## Advantage summary

- Direct Lead Acid Battery (AGM/GEL) replacement for 50AH.
- Faster charge, 1 hour of charging can provide up to 90% charge (Optional)
- High energy density and conversion efficiency
- Environmental Friendly, without any heavy metals
- High cycle times and longer service life of >1500 cycles @100% DOD
- Great high temperature performance
- Safety in use: Advanced intelligent BMS inside, No explosion, No fire.
- Ultra low self discharge rate <1.5%/month
- No maintenance required through out the lifetime.
- Great power saver
- Superior DOD (100%) over lead acid batteries.
- No acid splash and carbon mono-oxide emission so no need expensive battery maintenance room.





### ELECTRICAL SPECIFICATIONS

Nominal Voltage	25.6 V
Nominal Capacity	50 Ah
Capacity @ 0.5C	120 min
Energy	1280 Wh
Resistance	≤50 mΩ
Self Discharge	<1.5% Per Month
Maximum Modules In Series	Up to 25 (51.2V)

### CHARGE SPECIFICATIONS

Recommended Charge Current	25 A
Maximum Charge Current	50 A
Recommended Charge Voltage	28.4 V-29.2 V
BMS Charge Voltage Cut-Off	30.4 V (3.8 ±0.025 VPC) (1.1 ±0.4 s)
Reconnect Voltage	28.8 V (3.6 ±0.05 VPC)
Charging Method	CC-CV

### DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	50 A
Peak Discharge Current	200 A (<5s)
Recommended Low Voltage Disconnect	22 V (2.75 VPC)
BMS Discharge Voltage Cut-Off	16 V (2.0 ±0.08 VPC) (20 ±6 ms)
Reconnect Voltage	20 V (2.5 ±0.05 VPC)
Short Circuit Protection	200-600 μs

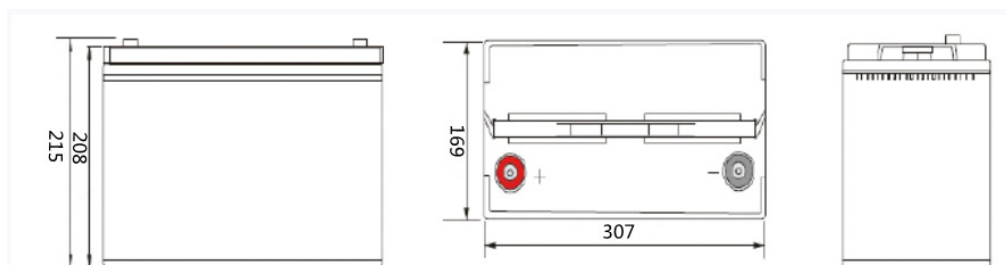
### TEMPERATURE SPECIFICATIONS

Discharge Temperature	- 4 °F to 140 °F (-20°C to 60 °C)
Charge Temperature	32 °F to 140 °F (0 °C to 60 °C)
Recommend Storage Temperature	32°F to 104 °F (0°C to 40 °C)

### MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	12.0 x 6.6 x 8.4 " 307 x 169 x 215 mm
Weight	13.1 Kg
Terminal Type	M8
Case Material	ABS
Enclosure Protection	IP55

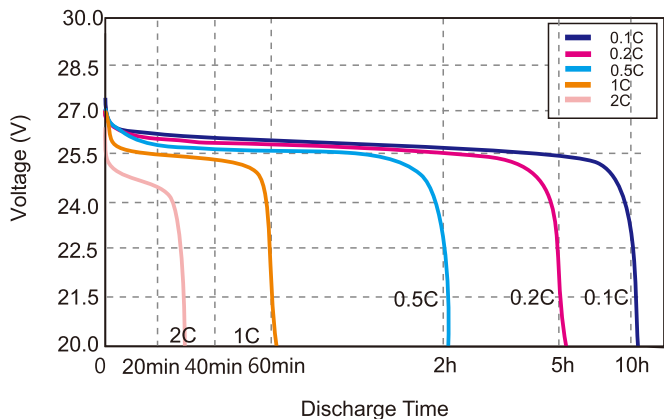
### DIMENSIONAL SPECIFICATIONS



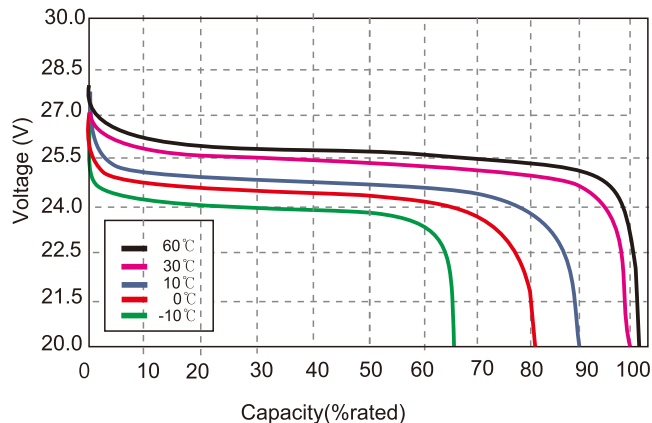


## Performance curve

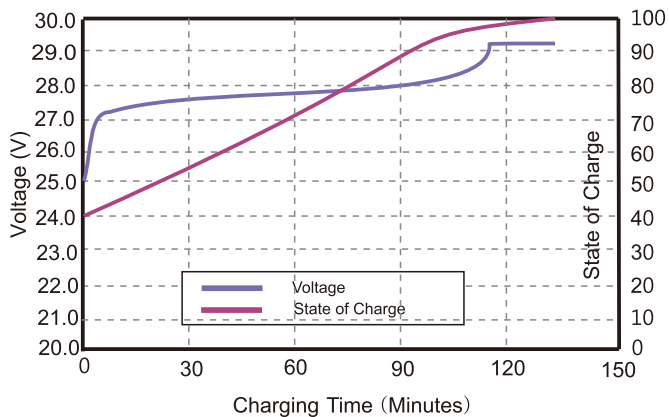
Different Rate Discharge Curve @25°C



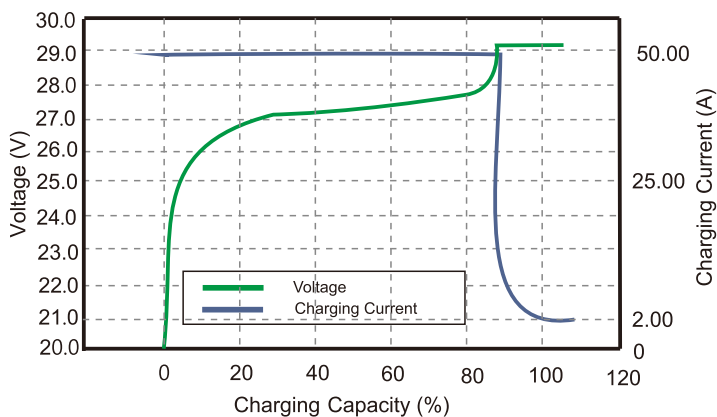
Different Temperature Discharge Curve @0.5C



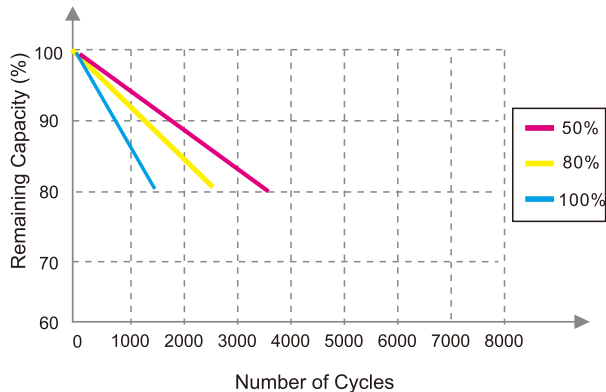
State of Charge Curve @0.5C 25°C



Charging Characteristics @0.5C 25°C



Different DOD Discharge Cycle Life Curve @1C



Different Temperature Self Discharge Curve

