LDP 24-40N

(25.2V 40Ah)

lithium iron battery

Your best power choice for energy storage system!

Bluetooth Monitoring

Vtpower Lithium iron battery solutions are more advanced, highly efficient and has many advantages over the traditional Lead Acid technology.
Here introducing popular LDP 24-40N battery of Vtpower which is high demanding among different industry users for its most advanced features.

Advantage summary

- Direct Lead Acid Battery (AGM/GEL) replacement for 40AH.
- 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.






Application

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

ELECTRICAL SPECIFICATIONS	
Nominal Voltage	25.2 V
Nominal Capacity	40 Ah
Capacity @ 0.5C	120 min
Energy	1008 Wh
Resistance	≤50 mΩ
Self Discharge	<1.5% Per Month
Maximum Modules In Series	Up to 2S (50.4V)

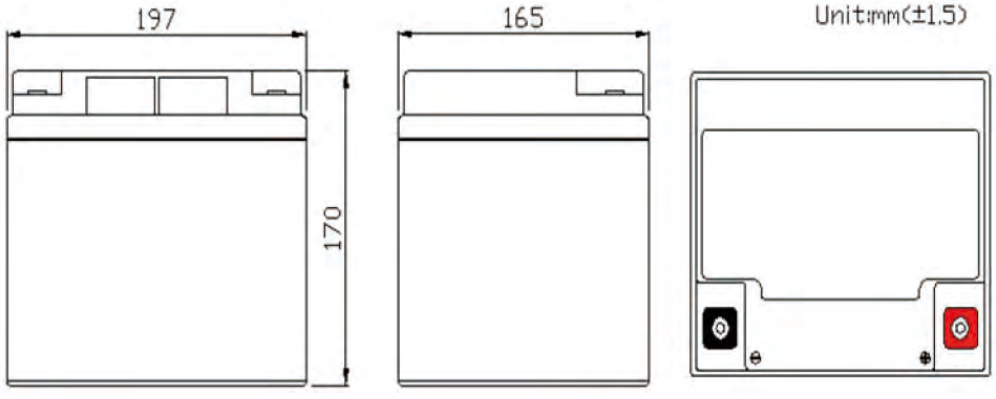
CHARGE SPECIFICATIONS	
Recommended Charge Current	8 A
Maximum Charge Current	20 A
Recommended Charge Voltage	29.4 V-29.8 V
BMS Charge Voltage Cut-Off	30.1 V (4.3 ±0.025 VPC) (1.1 ±0.4 s)
Reconnect Voltage	29.4 V (4.2 ±0.05 VPC)
Charging Method	CC-CV

DISCHARGE SPECIFICATIONS	
Maximum Continuous Discharge Current	70 A
Peak Discharge Current	200 A (＜5s)
Recommended Low Voltage Disconnect	21 V (3.0 VPC)
BMS Discharge Voltage Cut-Off	19 V (2.7 ±0.08 VPC) (20 ±6 ms)
Reconnect Voltage	20 V (2.9 ±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)

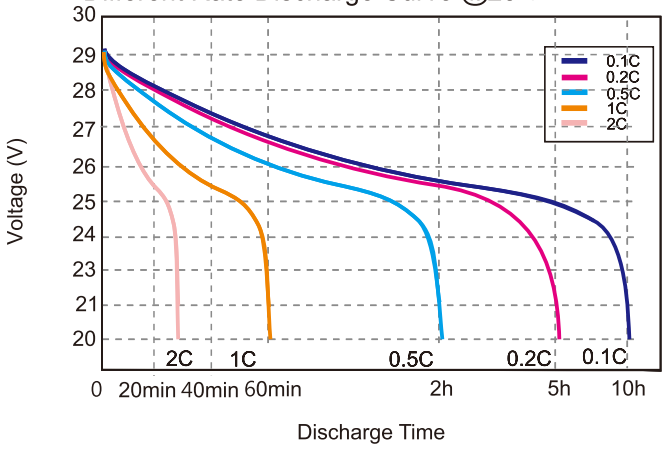
MECHANICAL SPECIFICATIONS	
Dimensions (L x W x H)	7.7 x 6.5 x 6.7 " 197 x 165 x 170 mm
Weight	6.0 Kg
Terminal Type	M6
Case Material	ABS
Enclosure Protection	IP55

DIMENSIONAL SPECIFICATIONS

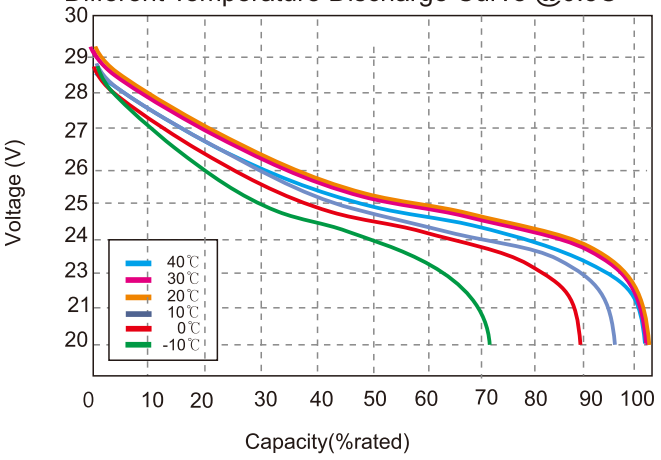


Performance curve

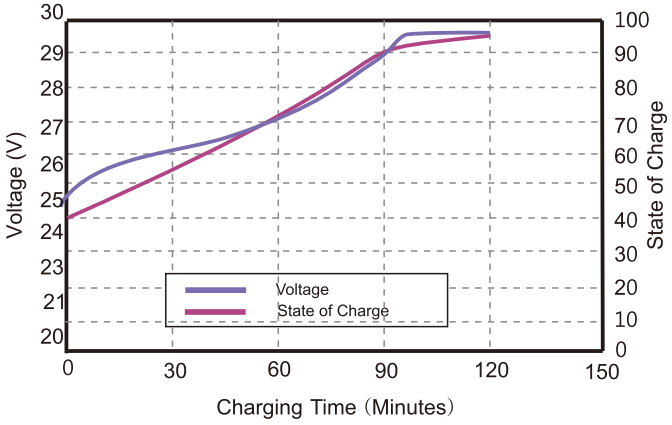
Different Rate Discharge Curve @25℃



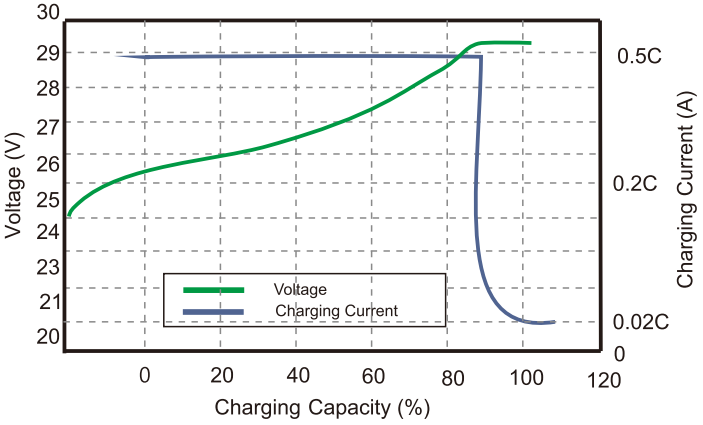
Different Temperature Discharge Curve @0.5C



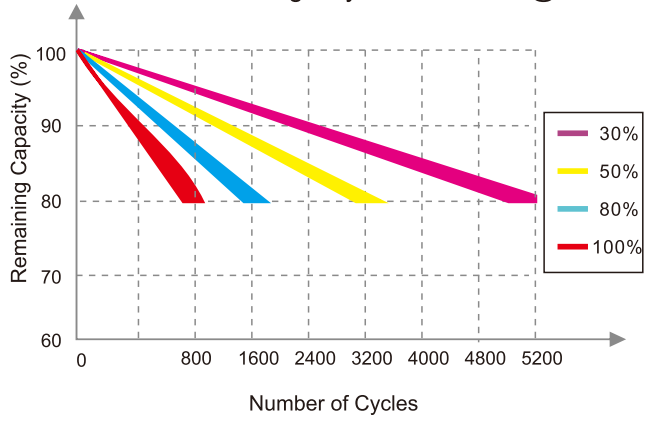
State of Charge Curve @0.5C 25℃



Charging Characteristics @0.5C 25℃



Different DOD Discharge Cycle Life Curve @0.2C



Different Temperature Self Discharge Curve