



# LDP 24-20N

## (25.2V 20Ah)

Lithium ion battery

Your best power choice for energy storage system!



VT Batteries Lithium ion battery solutions are more advanced, highly efficient and has many advantages over the traditional Lead Acid technology. Here introducing popular LDP 24-20N 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 20AH.
- 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           | 25.2 V           |
| Nominal Capacity          | 20 Ah            |
| Capacity @ 0.5C           | 120 min          |
| Energy                    | 504 Wh           |
| Resistance                | ≤50 mΩ           |
| Self Discharge            | <1.5% Per Month  |
| Maximum Modules In Series | Up to 25 (50.4V) |

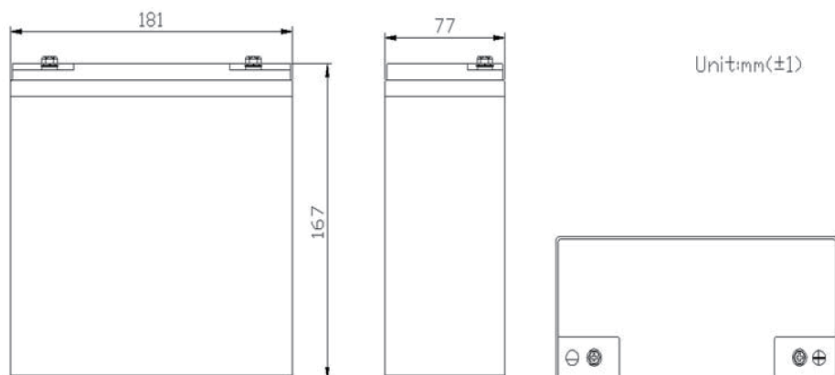
| CHARGE SPECIFICATIONS      |                                      |
|----------------------------|--------------------------------------|
| Recommended Charge Current | 4 A                                  |
| Maximum Charge Current     | 10 A                                 |
| Recommended Charge 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 | 20 A                            |
| Peak Discharge Current               | 100 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)    | 7.1 x 3.0 x 6.6 "<br>181 x 77 x 167 mm |
| Weight                    | 3.2 Kg                                 |
| Terminal Type             | M6                                     |
| Case Material             | ABS                                    |
| Enclosure Protection      | IP55                                   |

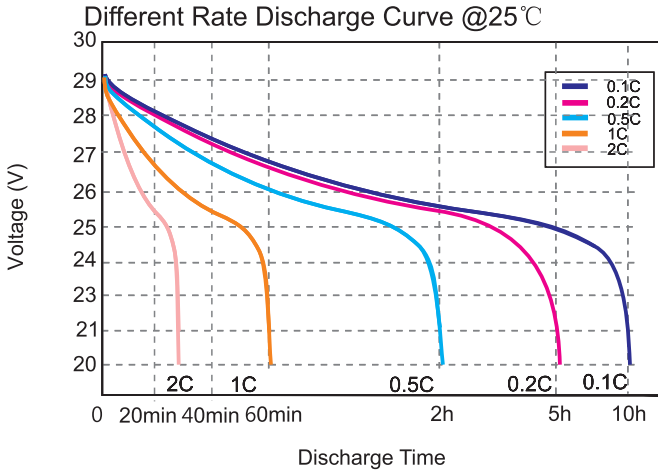
### DIMENSIONAL SPECIFICATIONS



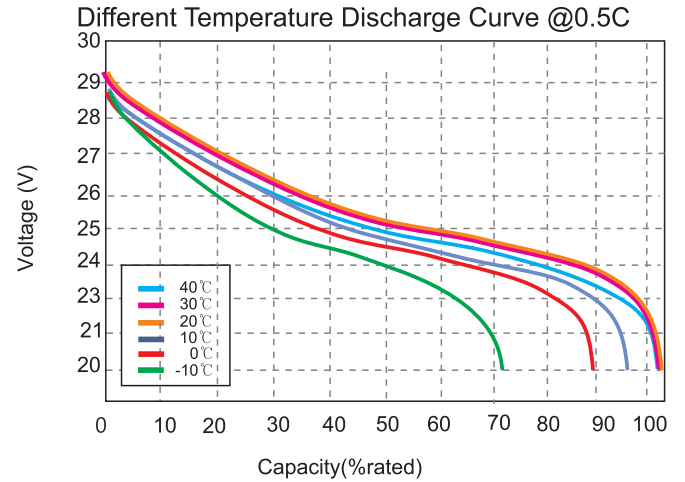


## Performance curve

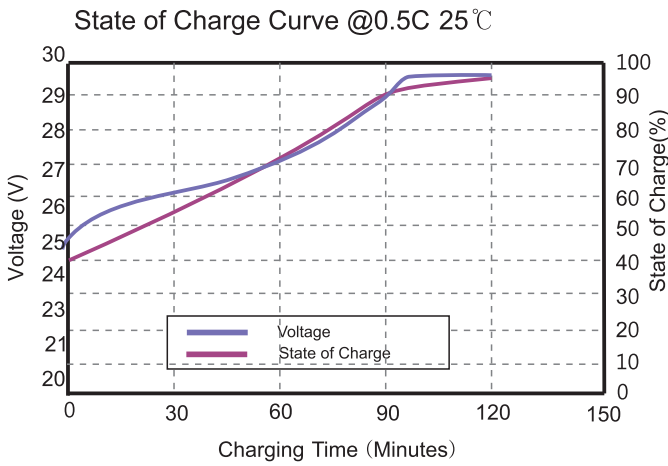
### Different Rate Discharge Curve



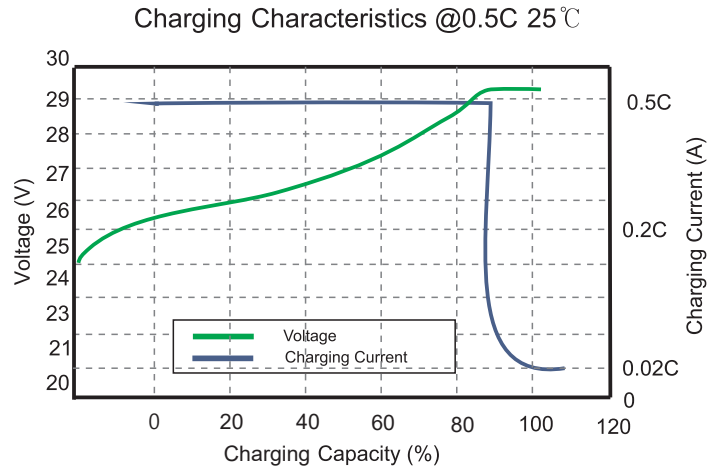
### Different Temperature Discharge Curve



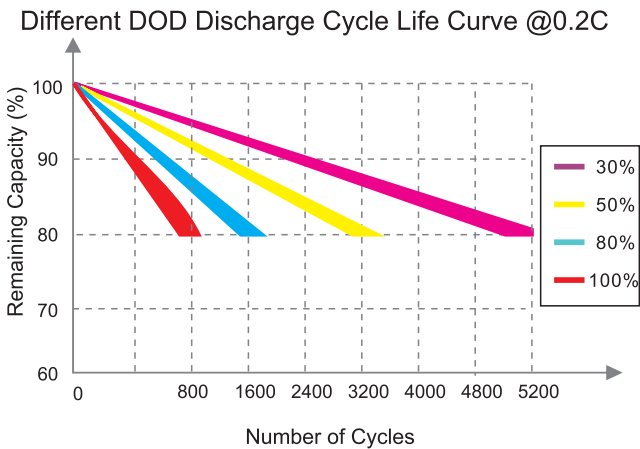
### State of Charge Characteristics Curve



### Charging Characteristics Curve



### Cycle Life Curve



### Self Discharge Characteristics Curve

