

LITHIUM IRON PHOSPHATE BATTERY

FEATURES

- Lithium Iron Phosphate (LiFePO₄)
- The Safest Lithium Technology
- Integrated Battery Management System(BMS)
- Maximum support 4 in series or 4 in parallel

PERFORMANCE

- Long Cycle Life >4000cycles@80%DOD
- High Density, High Discharge Current, High Temperature Range
- Low Weight, Free Maintenance
- Fast Charging
- Environment Friendly



LFP12-20 - 20AH

BATTERY DATA SHEET

| ELECTRICAL PARAMETERS | |
|------------------------------|---------------|
| Nominal Voltage | 12.8V |
| Rated Capacity | 20Ah |
| Energy | 256Wh |
| Resistance | ≤40mΩ |
| Efficiency | ≥98% |
| Cycle Life (1C,80%DOD,25°C) | > 4000cycles |
| Self Discharge | <5% per Month |
| Max.cell in Series/ Parallel | 4S/6P |

| MECHANICAL PARAMETERS | |
|-----------------------|--------------------------|
| Dimension(L×W×H) | 180.5x76x165mm |
| | 7.11x 2.99x 6.50" |
| Weight | 2.6kg |
| Terminal Type | M5 |
| Battery Housing | ABS |
| Housing Protection | IP65 |
| Cell Type-Chemistry | LiFePO ₄ Cell |
| Communication | / |

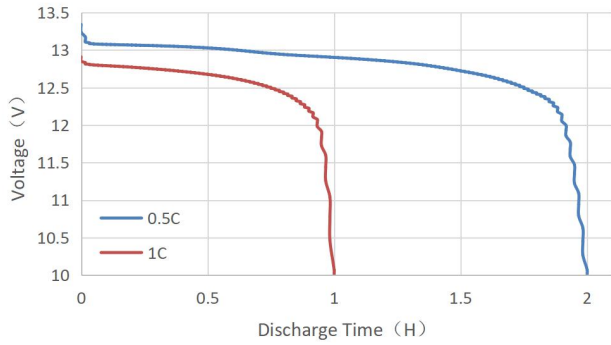
| DISCHARGE PARAMETERS | |
|-------------------------------|------------|
| Continuous Discharge Current | 20A |
| Pulse Discharge Current | 30A (<10S) |
| Recommended Volt. Disconnect | 10V |
| BMS Discharge Cut-off Voltage | 8.4V |
| Reconnect Voltage | 9.2V |
| Short Circuit Protection | 100-300us |

| CHARGE PARAMETERS | |
|----------------------------|------------|
| Charge Method | CC-CV |
| Charge Voltage | 14.2~14.6V |
| Recommended Float Voltage | 13.5~13.8V |
| Recommended Charge Current | 10A |
| Maximum Charge Current | 20A |
| BMS Charge Cut-off Voltage | 15V |

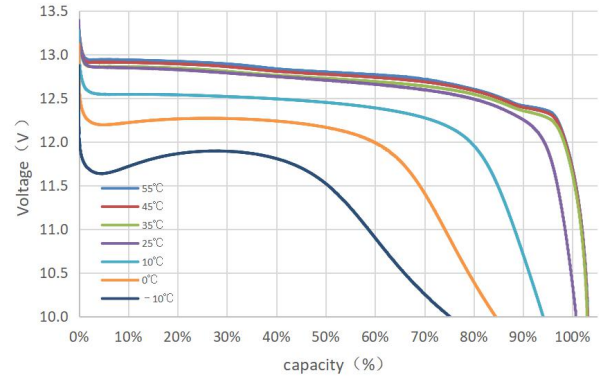
| TEMPERATURE PARAMETERS | |
|------------------------------|---------------|
| Discharge Temperature | -20°C to 60°C |
| Charge Temperature | 0°C to 55°C |
| Storage Temperature | -20°C to 60°C |
| BMS High Temperature Cut-off | 65°C |



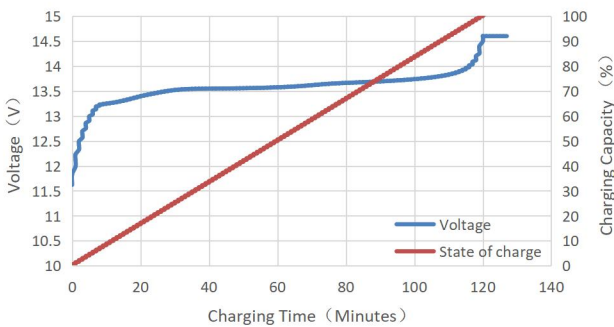
DIFFERENT RATE DISCHARGE CURVE (25°C)



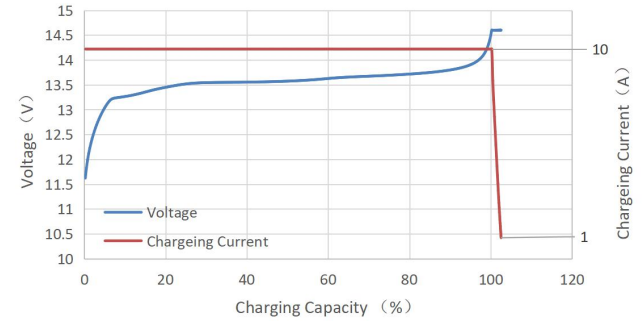
DIFFERENT TEMPERATURE DISCHARGE CURVE (0.5C)



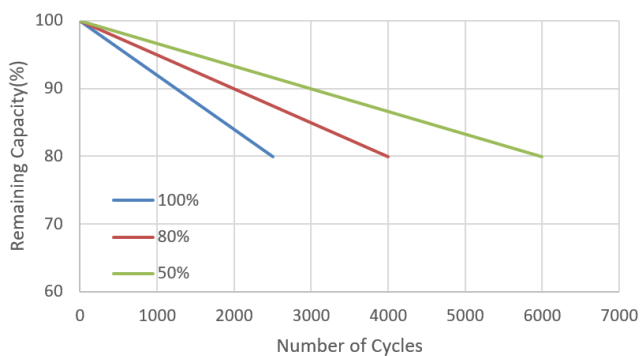
STATE OF CHARGE CURVE (0.5C, 25°C)



STATE OF CHARGE CURVE (0.5C, 25°C)



DIFFERENT DOD DISCHARGE CYCLE LIFE CURVE (1C)



DIFFERENT TEMPERATURE SELF DISCHARGE CURVE

