



LITHIUM BATTERY PACK

ESS-48V 50Ah

FEATURES

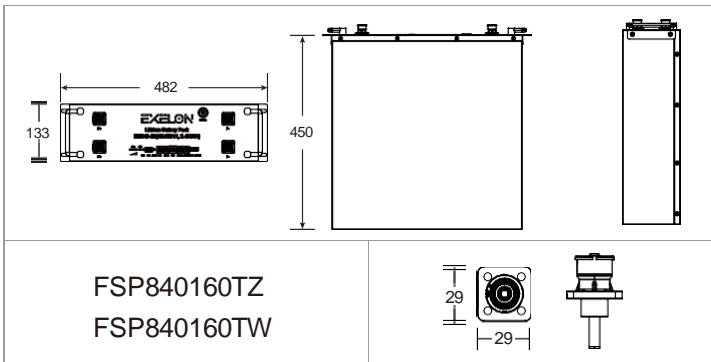
Lithium Iron Phosphate (LiFePO4): the Safest Lithium Technology.
 Integrated Battery Management System(BMS).
 Bluetooth/RS485/RS232/SMBus/CANBus (Optional).
 SOC LED/LCD Indicator(Optional).

PERFORMANCE

Long Cycle Life>6000cycles @80% DOD.
 High Density, High Discharge Current, High Temperature Range.
 Low Weight, Free Maintenance.
 Fast Charging.
 Environment Friendly.

CHARACTERISTICS

| Item | Specifications |
|-----------------|-----------------------|
| Nominal Voltage | 48V |
| Rated Capacity | 50Ah |
| Energy | 2400Wh |
| Resistance | ≤20mΩ |
| Efficiency | 99% |
| Cycle Life | >6000cycles @ 80% DOD |
| Self Discharge | 2% per Month |



| | |
|----------------------|-----------------------|
| Dimension(L x W x H) | 482 x 450 x 133 mm |
| | 18.98 x 17.71 x 5.23" |
| Weight | 25.6kg(56.4lbs) |
| Terminal Type | FSP840160TZ/TW |
| Battery Housing | Metal |
| Housing Protection | IP56 |
| Cell Type-Chemistry | LiFePO4 Battery Cell |
| SoC Display | LED/LCD Indicator |

| | |
|------------------------------|---------------------------|
| Discharge Temperature | -20 to 60°C (-4 to 140°F) |
| Charge Temperature | 0 to 45°C (32 to 113°F) |
| Storage Temperature | 0 to 60°C(32 to 140°F) |
| BMS High Temperature Cut-off | 80°C(176°F) |

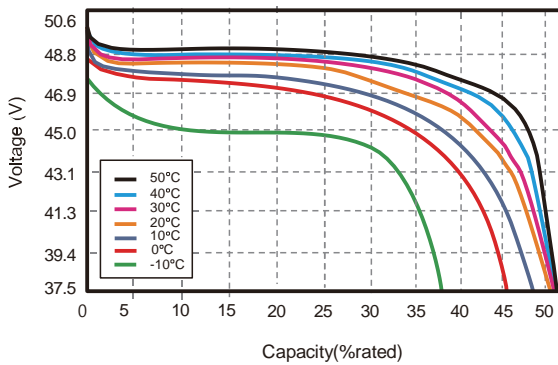
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|----------------------------|----------|
| Charge Method | CC-CV |
| Charge Voltage | 54~55.5V |
| Recommended Float Voltage | 51.75V |
| Recommended Charge Current | 25A |
| Maximum Charge Current | 50A |
| BMS Charge Cut-off Voltage | 58.5V |

| | |
|-------------------------------|------------------|
| Continuous Discharge Current | 50A |
| Pulse Discharge Current | 100A(<3 seconds) |
| Recommended Volt. Disconnect | 37.5V |
| BMS Discharge Cut-off Voltage | 30V |
| Reconnect Voltage | 34.5V |
| Short Circuit Protection | 200~600 us |

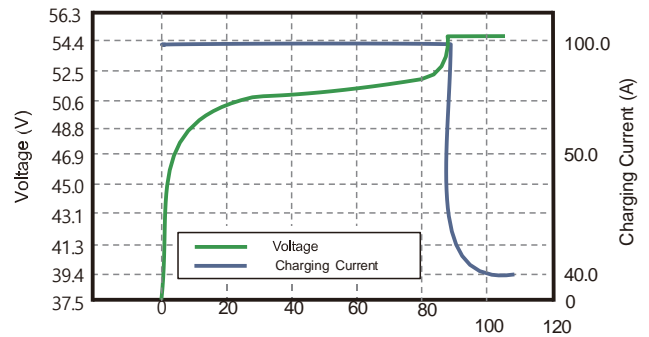
CHARACTERISTICS

- + Military Power Supply
- + Solar Energy Storage System
- + Solar Street LED Lightings
- + Industrial Robotics & Handling Equipment
- + Aerial Work Platform

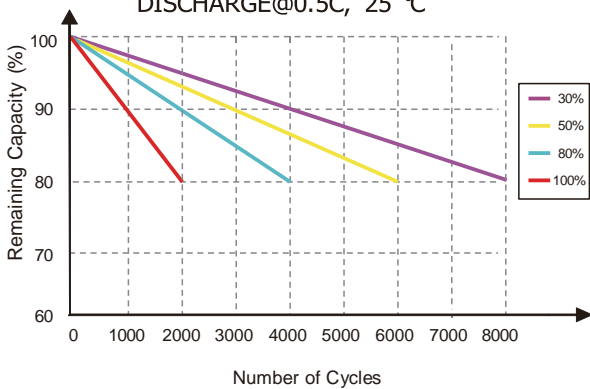
DISCHARGE CAPACITY at VARIOUS TEMPERATURES
DISCHARGE @0.5C, 25 °C



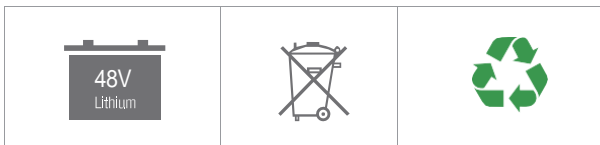
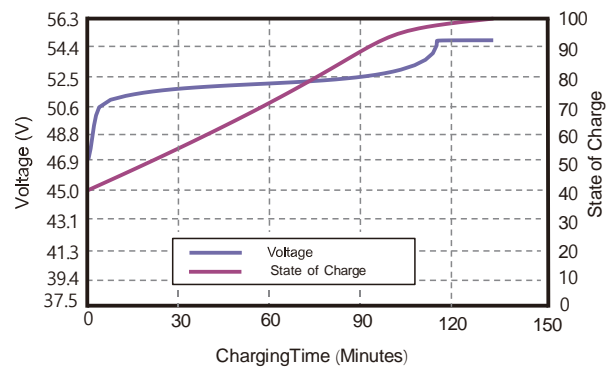
CHARGING CHARACTERISTICS @0.5C, 25 C



CYCLE LIFE vs.DEPTH OF DISCHARGE(DOD)
DISCHARGE@0.5C, 25 °C



STATE OF CHARGE CURVE @0.5C, 25 C



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NOTE: Do Not Mix With Sealed Lead Acid Batteries When Recycling.

