

Magic Battery Pack 8D 36V 173Ah

MECHANICAL SPECIFICATIONS

| MODEL | DIMENSIONS INCHES (MM) | | | WEIGHT LBS.(KG) | CASE MATERIAL | TERMINAL TYPE | TORQUE | IP Rating | CASE FLAME RATING |
|-----------|------------------------|----------|----------|-----------------|---------------|---------------|----------|-----------|-------------------|
| 36V173-8D | LENGTH | WIDTH | HEIGHT | 130(59kg) | METAL | M8 X 1.25-D10 | 9-10 N-m | IP54 | UL94 V-0 |
| | 20.7(525) | 11 (280) | 9.8(250) | | | | | | |

OTHER SPECIFICATIONS

| FUNCTION DESCRIPTION | |
|---------------------------|------------------------|
| Nominal Voltage | 38.4V |
| Cell Chemistry | LiFePO4 |
| Cell Type | Prismatic |
| Ampere-hour Capacity | 173Ah |
| Watt-hour Capacity | 6.643kWh |
| Charge Efficiency | 99% |
| Impedance (50% SOC, 1kHz) | ≤ 13mΩ |
| Cycles @ 70% DOD | >4000 |
| Parallel Connection | Up to 6 (173Ah-1050Ah) |
| Serial Connection | Up to 2 (38.4V-76.8V) |

OTHER SPECIFICATIONS

| OTHER DESCRIPTION | |
|-----------------------------|---|
| Battery Internal Protection | Short Circuit Current Temperature Over Voltage Under Voltage Over-current |
| Battery Functions | Cell Balancing, State Of Charge, CAN |
| Safety Systems | Fuse, Hardware, BMS |
| Shipping Classification | UN3480, Class 9 |

DISCHARGE SPECIFICATIONS

| EMISSION INSTRUCTIONS | |
|---|-------------------------------------|
| Continuous Discharge Current | 173A |
| Peak Discharge Current | 250A - 300s |
| Peak Discharge Current | 400A - 5s |
| Short Circuit Protection | 1600A - 100us, no automatic restart |
| Low Voltage Reconnect | Automatic |
| Self-Discharge per Month @ 25°C in OFF mode | 3.3% |

ENVIRONMENTAL SPECIFICATIONS

| | |
|-----------------------|--------------------------|
| Charge Temperature | 32°F~131°F (0°C~55°C) |
| Discharge Temperature | -22°F~140°F (-30°C~60°C) |
| Operating Humidity | 90%RH |

CHARGE SPECIFICATIONS

ONLY FOR ONE 36V173-8D

| MAXIMUM CHARGING CURRENT | | | | |
|--------------------------|-------|-------|-------|-------|
| TEMP \ SOC | <80% | <90% | <98% | <100% |
| (0,10] | 0.37C | 0.37C | 0.12C | 0.12C |
| (10,45] | 1C | 0.8C | 0.5C | 0.5C |
| (45,55] | 0.5C | 0.5C | 0.4C | 0.4C |

1. Series connection increases the voltage, the maximum discharge current remains the same.
2. Parallel connection increases the capacity and also increases the maximum discharge current.



Flexible Combination

Supports multiple batteries in parallel or (and) series, up to 76.8V or 1050Ah



Super Safety

Smart BMS provides multi-protection



Intelligent Management

Advanced cell to cell battery to battery balancing design, Automatic fault diagnosis



Easy Connection

Dual M8 terminals
Customizable battery pack according to manual

