# Guangdong JIEYO New Energy Technology Co., Ltd.

## JYF1221 12.0V42Ah 504Wh Sodium Ion Battery

| ELECTRICALPERFORMANCE | |
|---|---|
| NominalVoltage | 12.0V |
| NominalCapacity | 42Ah |
| Capacity@7.5A | 110min |
| Energy | 504Wh |
| Resistance | ≤40mΩ@50%SOC |
| SelfDischarge | <3%/Month |


| CHARGEPERFORMANCE | |
|---|---|
| RecommendedChargeCurrent | 20A |
| MaximumChargeCurrent | ≤20A |
| RecommendedChargeVoltage | 15.0V |
| BMSChargeCut-OffVoltage | <15.2V |
| ReconnectVoltage | >14.4V |
| BalancingVoltage | <14.1V |

| DISCHARGEPERFORMANCE | |
|---|---|
| Maximum Continuous Discharge Current | 20A |
| Peak Discharge Current | ≤40A |
| BMS Discharge Cut-OffCurrent | 40A±1A |
| Cold start current（CCA） | 1200(5S) |
| Recommended Low Voltage Disconnect | 7.2V |
| BMS Discharge Cut-Off Voltage | >7.2V(2s) |
| Reconnect Voltage | >8.0V |
| ShortCircuit Protection | 1000~1500μs |

**PROTECTING CHARACTERISTICS**

| Protection Function | Comments |
|---|---|
| Overcurrent protection during charging | Stop Charging |
| Overcurrent protection for discharging | Stop Charging |
| Short-circuit protection | Stop output |
| Low-voltage protection | Stop output |
| Overcharge protection | Stop output |

**External shape characteristics**

| | |
|---|---|
| Shell material | Plastic cover shell |
| Product weight | 7.6-8kg |
| Protection grade | IP65 |
| Specification: LxWxHxHT mm | 280x178x166x188 |

**Charging characteristics**

| | |
|---|---|
| Input voltage range | 14-15.5VDC±1VDC |
| Charging current | 15-12A |
| Estimated charging time | 3-4h |

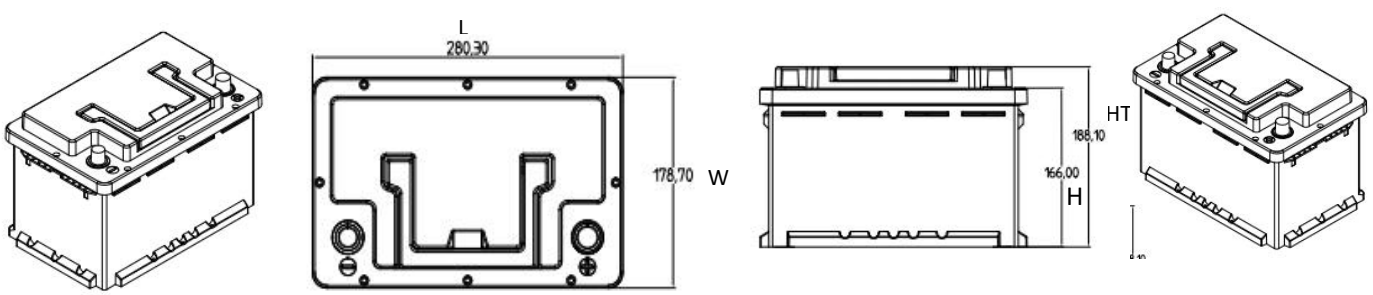
**Certification**

| | |
|---|---|
| Shipping Classification | UN38.3 MSDS |

**Unique features:**

1.High safety performance: No fire or explosion during puncture, resistant to overcharging and overdischarging.
2.Strong starting capability: The cold start current is 1.5 times that of lead-acid batteries, allowing for quick and instant startup. The voltage is the same as that of lead-acid batteries, without affecting the circuit.
3.High service life: 3000 cycles, more than 50,000 start-ups, and can be used for 8 to 10 years.
4.Not prone to freezing: Even at -40° C, it can discharge 80% and still start the car easily.
5.Not prone to starvation: Discharging to 0V will not damage it. After charging, it can recover its capacity and fully recover.
(Lead-acid batteries and lithium batteries will be permanently damaged and irreparable due to excessive depletion.)

Outline Dimension




| L(mm) | W(mm) | H(mm) | HT(mm) |
|---|---|---|---|
| 280 | 178 | 166 | 188 |