APS018-LIR7580290-6800mAh Series

6.8Ah, 51.2V Rechargeable Lithium Iron Phosphate Battery System

RoHS Compliant

Features

- Rechargeable Lithium Iron Phosphate Battery System
- Nominal capacity 6.8Ah
- Nominal voltage: 51.2V
- Max Charge current 3.4A
- Discharge Temp. -10˚C to 60˚C
- Dimensions: 75x80x290mm
- 1-year Warranty

*Product images are for illustrative purposes only and may vary from actual design.

Applications

- Small portable electronics

Model List*(See part number scheme for model number details)

Model Number	Nominal Capacity	Nominal Voltage	Charging cut-off voltage	Operating Temperature
APS018-LIR7580290-6800mAh	6.8Ah	51.2V	≤58.4V	0~45°C

Technical Data

Rated Capacity	6.8Ah, Standard discharge (0.2C_5) to 32V, after standard charge (0.2C_5) to 58.4V, then CV till current to 0.02C
Minimal Rated Capacity	6.6Ah, Standard discharge (0.2C_5) to 32V, after standard charge (0.2C_5) to 58.4V, then CV till current to 0.02C
Nominal Voltage	51.2V
Life Exception	Higher than 80% of the Initial Capacity of the Cells, Charge: CC@0.2C to 58.4V, then CV till current to 0.02C, Rest: 30min., Discharge: 0.2C to 32V, Temperature: 20±5℃, Carry out 2000 cycles 80% DOD
Discharge cut-off voltage	≥32V(recommended)
Charging cut-off voltage	≤58.4V(recommended)
Cell and assembly method	IFR26650-3.4Ah, 16S2P
Housing material	PVC
Standard charge	0.2C constant current (CC) charge to 58.4V, then constant voltage (CV) 58.4V charge until charge current declines to ≤0.02C, Charge time: Approx7h
Standard discharge	Constant current 0.2C Cut-off voltage 32V
Maximum Charge Current	3.4A(recommended)
Max Continuous Discharge Current	20A(120s)
Operation Temperature Range	Charge: 0~45℃, Discharge: -10~60℃; 60±25%R.H. 23±5°C (recommended)
Storage Temperature Range	Less than 1 year: 0~25℃, Less than 3 months: -10~35℃; 60±25% R.H.
Weight	3.2kg, IFR26650-3.4Ah*32
Dimensions	75x80x290mm; Type of terminal XT40
Dimension Measuring Instrument	The dimension measurement shall be implemented by instruments with equal or more precision scale of 0.01mm.

Technical Sales / Customer Service: +1-818-338-7788 • Email: sales@autec.com
31328 Via Colinas Suite 102 • Westlake Village, CA 91362 USA • **www.autec.com**

■ Technical Data(cont.)

Voltmeter	Standard class specified in the national standard or more sensitive class having inner impedance more than 10kΩ/V
Ammeter	Standard class specified in the national standard or more sensitive class. Total external resistance including ammeter and wire is less than 0.01Ω
Impedance Meter	Impedance shall be measured by a sinusoidal alternating current method (1kHz LCR meter).
Standard Charge	Standard Charge: 0.2C, Charging shall consist of charging at a 0.2C constant current rate until the battery reaches 58.4V. The battery shall then be charged at constant voltage of 58.4V volts while tapering the charge current. Charging shall be terminated when the charging current has tapered to 0.02 C_5A. Charge time: Approx. 7.0h, The battery shall demonstrate no permanent degradation when charged between 0°C and 45°C.
Standard Discharge	1C, Battery shall be discharged at a constant current of 1C to 32V @ 20± 5°C
LT Discharge performance	Cell 0.2C discharge to 32V at 20℃, Higher than 65%of the Initial Capacity of the cell, (after full standard charged) Pack's LT Discharge performance is decided by PCM
No Short Circuit	Never short circuit battery. It generates very high current which causes heating of the battery and may cause electrolyte leakage, gassing or explosion that is very dangerous. The poles may be easily short-circuited by putting them on conductive surface. Such outer short circuit may lead to heat generation and damage of the battery. An appropriate circuitry with PCM shall be employed to protect accidental short circuit of the battery pack.

Notes:

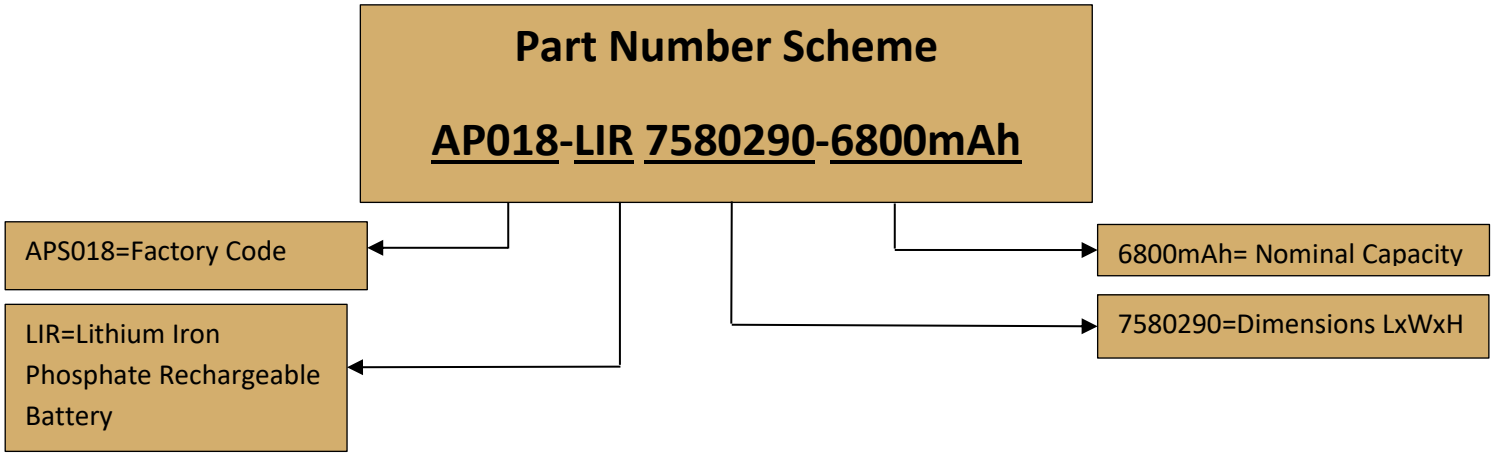
1. Test should be conducted with new batteries within one week after shipment from our factory and the batteries shall not be cycled more than five times before the test. Unless otherwise specified, test and measurement shall be done under temperature of 20±5℃ and relative humidity of 45~85%. If it is judged that the test results are not affected by such conditions, the tests may be conducted at temperature 15~30℃ and humidity 25~85%RH.

2. If not otherwise specified, the rest time between charging and discharging is 30 min.

■ Mechanical Diagram(TBD)

Warnings

1. **Improper use of power bank will damage the battery and its life.**
2. **Do not charge the power bank with an abnormal charger.**
3. **Keep the power bank dry and ventilated.**
4. **Improper use of the power bank will cause the bank to rupture, leak, or overheat, causing permanent damage to the power bank. In some cases could even cause a fire or explode.**
5. **Keep away from fire or temperatures that exceed 80˚C.**
6. **Do not submerge under water, the power bank's protections will be damaged and not work properly.**
7. **Do not use anything to deform or misshapen the power bank.**
8. **If the positive and negative poles of the power bank are reversed, it could shorten the power bank's life, could make it overheat, catch fire and cause damage.**



***Product images are for illustrative purposes only and may vary from actual design.**
***Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.**