

ASTERION BATTERY LFP 1220

Asterion Battery LFP 1220 on lithium iron phosphate cells is designed for industrial, residential, commercial and private applications. This lithium products, due to its maintenance-free features and improved design characteristics, is ideal for working in a wide variety of fields: 12V solar and alternative energy storage, 12V UPS systems.



General specifications

Cell type	LiFePO ₄
Battery control system	Built-in BMS
Case material	ABS plastic
Dimensions (L x W x H)	182 x 77 x 165±2 mm
Weight	2.15±0.5 kg
Terminal type	LC1 (M5)
Discharge temperature	-10 °C to 50 °C
Charge temperature	0 °C to 45 °C
Storage temperature	-10 °C to 30 °C
Relative humidity	60±25 %

Electrical specifications at 25 °C

Rated voltage	12.8 V
Rated capacity	20 Ah
Accumulated energy	256 Wh
Rated charge voltage	14.6 V
Voltage range	9.2–14.6 V
Charge voltage in standby mode	13.6–13.8 V
Charge voltage in cycle mode	14.4–14.6 V
Max charge current	20 A
Max discharge current	20 A
Cycle life (0.2C, DoD 100 %, 25 °C)	≥3,000 cycles

Constant current discharge at 25 °C

Discharge time	1 h	2 h	4 h	5 h	8 h	10 h	15 h	20 h
Cut-off voltage (10.8 V)	20 A	10 A	5 A	4 A	2.5 A	2.0 A	1.33 A	1.0 A

Constant power discharge at 25 °C

Discharge time	1 h	2 h	4 h	5 h	8 h	10 h	15 h	20 h
Cut-off voltage (10.8 V)	256 W	128 W	64 W	51.2 W	32.0 W	25.6 W	17.07 W	12.8 W

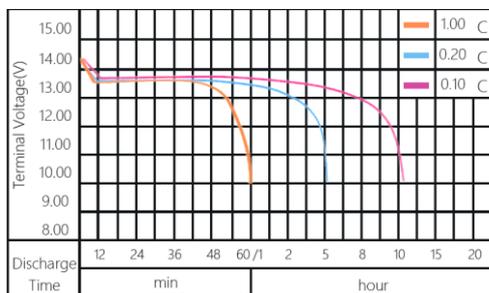
Built-in protection

- Overvoltage / undervoltage protection
- Discharge / charge overcurrent protection
- Overtemperature protection

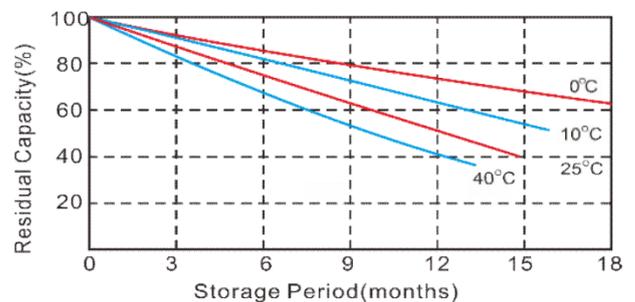
Application

- Single only

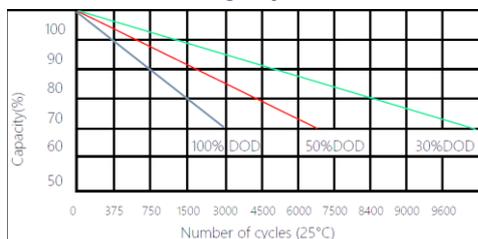
Discharge characteristics (25°C)



State of charge curve (0.5C, 25°C)



Different DOD discharge cycle life curve (25°C)



Constant voltage charging characteristics

