

JPC SERIES LEAD CARBON BATTERY

JPC12-120

APPLICATIONS

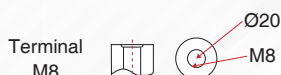
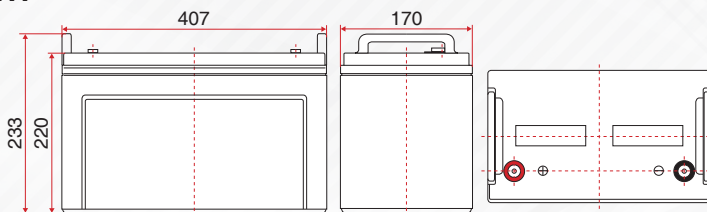
- Solar / wind energy and other new energy storage
- Hybrid vehicles, electric bicycles and other new energy vehicles
- Other backup or cycle purposes

GENERAL FEATURES

- Lead-carbon composite negative plate, both capacitance and battery characteristics
- Long cycle life, excellent deep cycle discharge ability
- Excellent charge acceptance ability
- Optimized capability of instant high-current discharging
- Strong high and low temperature performance
- Precision sealing technology

DIMENSION AND WEIGHT

	JPC12-120
Length	407mm
Width	170mm
Height	220mm
Total Height	223mm
Weight	Approx. 36.0kg



PRODUCT SPECIFICATIONS

ITEM	JPC12-120
Nominal voltage	12V
Nominal capacity	120Ah
Design life	15 years
Terminal	M8
Approx. weight	Approx 36.0kg (79.4lbs)
Container material	ABS
Rated capacity	120Ah 10 Hour rate (12.0A to 10.8V) 97.5Ah 3 Hour rate (32.5A to 10.8V) 79.3Ah 1 Hour rate (79.3A to 10.5V)
Internal resistance	Full charged at 25°C: 4.2 mΩ
Max discharge current	1440A (5s)
Operating temperature	Discharge: -40 ~ 60°C (-40 ~ 140°F) Charge: -20 ~ 50°C (-4 ~ 122°F) Storage: -20 ~ 50°C (-4 ~ 122°F)
Charge method (25°C)	Charge current: Max. 36A; recom. 12.0 ~ 18.0A Float charge: 13.5 - 13.8V, recom. 13.5V (-18mV/°C) Equalize charge: 13.8 - 14.1V, recom. 14.1V (-24mV/°C) Cycle charge: 14.4 - 15.0V, recom. 14.4V (-30mV/°C)
Self discharge	3% of capacity declined per month at 25°C

Constant current discharge characteristics unit: A (25°C, 77°F)

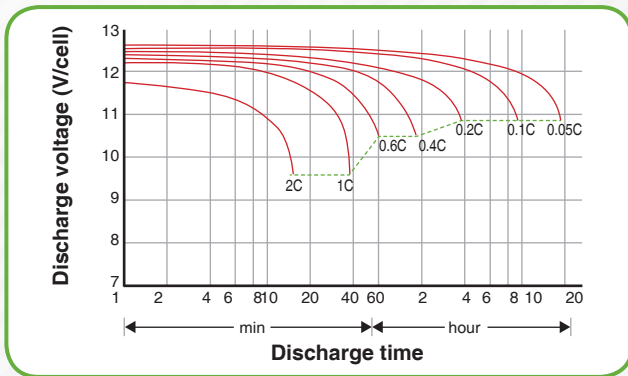
VOLTAGE	JPC12-120									
F.V TIME	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	431	232	141	81.6	46.8	34.0	22.8	15.0	12.6	6.62
1.65V	418	225	139	81.1	46.6	33.6	22.6	14.8	12.5	6.58
1.70V	401	220	136	80.5	46.2	33.1	22.3	14.7	12.4	6.54
1.75V	369	213	135	79.3	45.5	32.8	22.1	14.6	12.2	6.52
1.80V	331	198	129	77.3	44.7	32.5	21.5	14.5	12.0	6.48
1.85V	295	177	118	71.6	42.4	30.6	20.4	13.9	11.8	6.38

Constant power discharge characteristics unit: W/cell (25°C, 77°F)

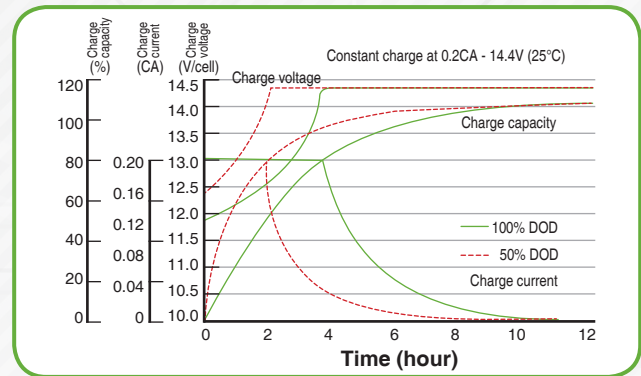
VOLTAGE	JPC12-120									
F.V TIME	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	723	408	255	154	88.5	64.6	43.2	29.1	24.2	13.1
1.65V	695	401	253	153	88.3	63.8	43.0	28.9	24.0	13.0
1.70V	692	396	253	152	87.9	36.4	42.6	28.7	23.8	13.0
1.75V	645	394	251	151	87.4	63.1	42.4	28.5	23.5	12.9
1.80V	593	372	245	150	87.2	62.8	41.9	28.3	23.3	12.8
1.85V	529	333	225	139	83.3	59.7	40.0	27.3	22.9	12.7

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information

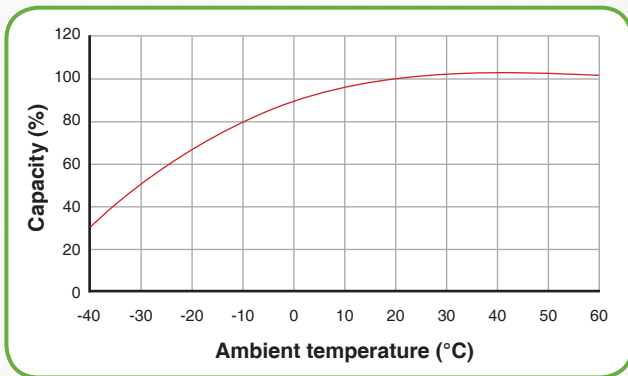
Discharge characteristics



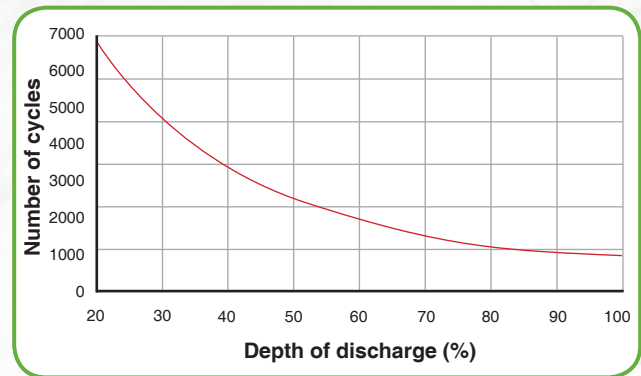
Charging characteristics



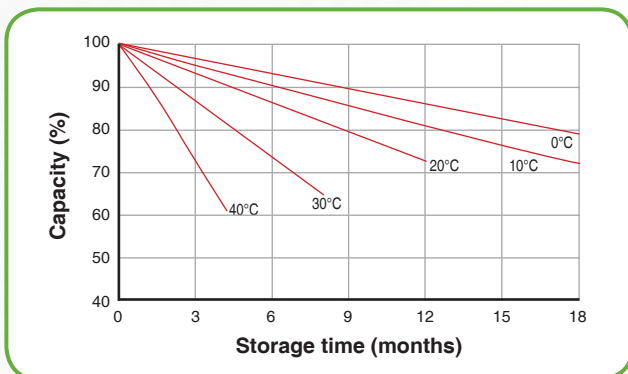
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

