

JPC SERIES LEAD CARBON BATTERY

JPC12-100

APPLICATIONS

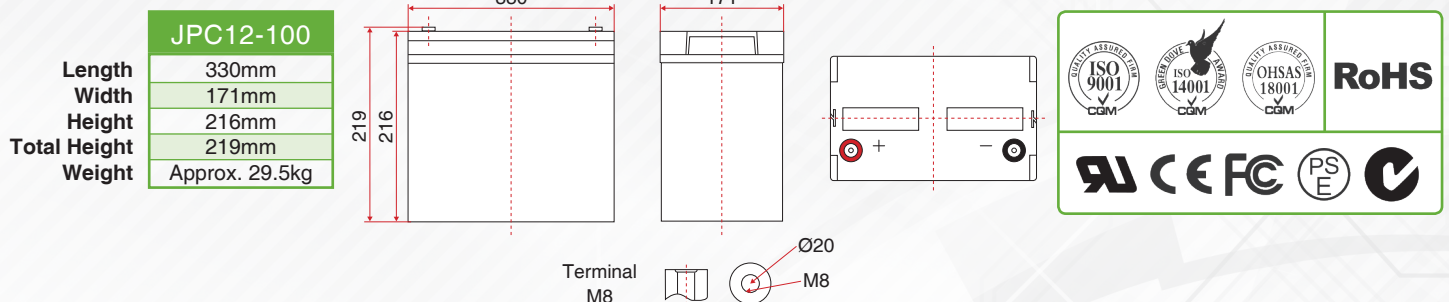
- Solar / wind energy and other new energy storage
- Hybrid vehicles, electric bicycles and other new energy vehicles
- Other backup or cycle purposes

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



PRODUCT SPECIFICATIONS

ITEM	JPC12-100
Nominal voltage	12V
Nominal capacity	100Ah
Design life	15 years
Terminal	M8
Approx. weight	Approx 29.5kg (64.9lbs)
Container material	ABS
Rated capacity	<div style="display: flex; flex-direction: column; gap: 5px;"> <div>100Ah 10 Hour rate (10.0A to 10.8V)</div> <div>81.3Ah 3 Hour rate (27.1A to 10.8V)</div> <div>66.1Ah 1 Hour rate (66.1A to 10.5V)</div> </div>
Internal resistance	Full charged at 25°C: 4.8 mΩ
Max discharge current	1200A (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. 30A; recom. 10.0 ~ 15.0A 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)

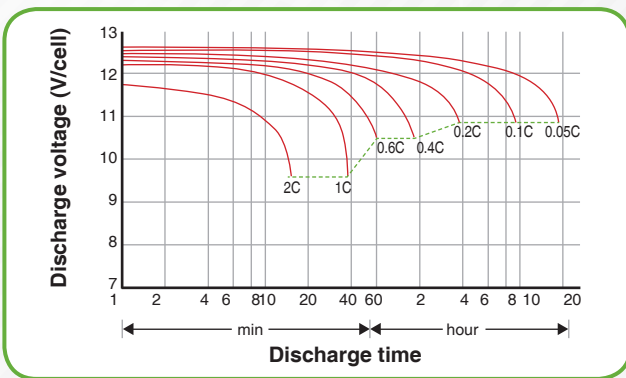
VOLTAGE	JPC12-100									
F.V TIME	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	359	193	117	68.0	39.0	28.3	19.0	12.5	10.5	5.51
1.65V	348	187	115	67.6	38.8	28.0	18.8	12.4	10.4	5.48
1.70V	335	183	113	67.1	38.5	27.6	18.6	12.3	10.3	5.45
1.75V	308	177	112	66.1	37.9	27.3	18.4	12.2	10.2	5.43
1.80V	276	165	108	64.4	37.2	27.1	17.9	12.1	10.0	5.40
1.85V	246	147	98.2	59.7	35.3	25.5	17.0	11.6	9.80	5.31

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

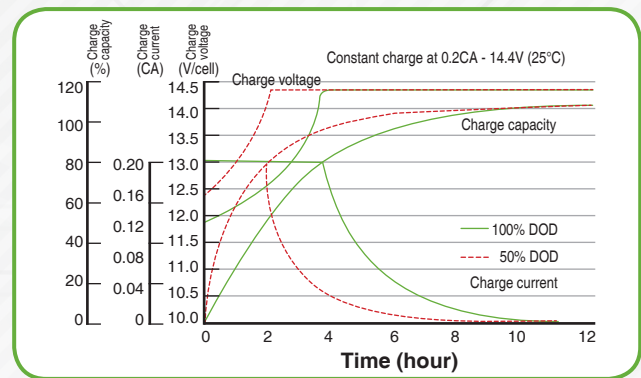
VOLTAGE	JPC12-100									
F.V TIME	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	603	340	213	129	73.7	53.8	36.0	24.2	20.2	10.9
1.65V	580	334	211	128	73.5	53.2	35.8	24.0	20.0	10.9
1.70V	577	330	211	127	73.2	52.9	35.5	23.9	19.8	10.8
1.75V	538	328	210	126	72.8	52.6	35.3	23.7	19.6	10.8
1.80V	494	310	205	125	72.7	52.4	34.9	23.5	19.4	10.7
1.85V	441	277	188	116	69.4	49.8	33.4	22.8	19.1	10.6

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

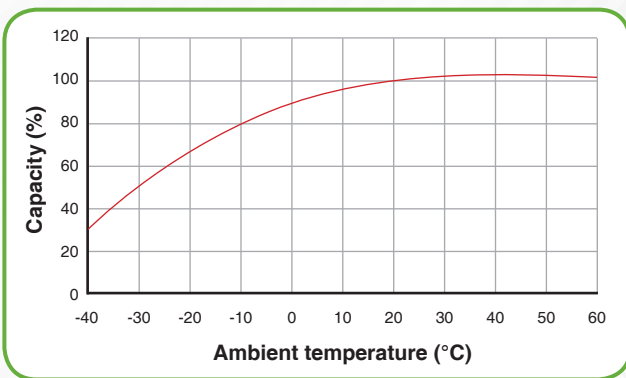
Discharge characteristics



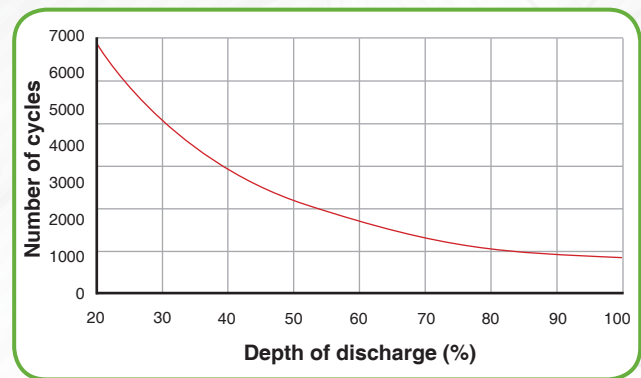
Charging characteristics



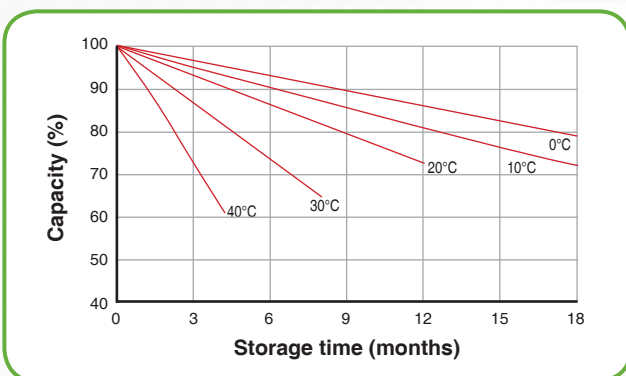
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

