

LEAD-CARBON BATTERY

CB250-12 [12V250AH]



- Design life is 20 years (more than 2000 cycles @ 80% DOD)
- Combine the advantage of VRLA battery and supercapacitor
- Ideal for PSoC cycle application in Renewable Energy (RE).
- High power, rapid charge/discharge
- Add functional activated carbon and graphene to negative plates to get excellent acceptance in charge performance
- Waterproof, anti-salt treatment, shockproof module installation design
- Comply with IEC60896, IEC61427 etc

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	250Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 72.0 Kg (Tolerance± 2%)
Internal Resistance	Approx. 5.5 mΩ
Terminal	M8
Max. Discharge Current	1800A (5 sec)
Design Life	20 years @ 25°C
Maximum Charging Current	30.0 A
Cycle Use Voltage	13.8 V~14.0 V @ 25°C Temperature Compensation: -4mV/°C/ Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	The batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.
Container Material	ABS

ISO9001 ISO14001



Application

- Home energy storage system
- Smart power grid system
- Distributed energy storage system
- Solar and wind energy storage system
- Solar power generation grid or off-grid energy storage system
- Generation and battery hybrid energy storage system

Constant Current Discharge Characteristics :A (25°C)

F.V/Time	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR	48HR	72HR	100HR	120HR
1.60V	55.5	32.5	24.2	19.1	16.1	11.0	9.66	5.22	2.23	1.53	1.13	0.96
1.65V	54.4	31.9	23.8	18.9	15.9	10.9	9.56	5.17	2.21	1.51	1.11	0.95
1.70V	53.0	31.2	23.3	18.5	15.7	10.7	9.43	5.10	2.18	1.49	1.10	0.94
1.75V	51.1	30.2	22.6	18.0	15.3	10.5	9.25	5.00	2.14	1.47	1.08	0.92
1.80V	48.5	28.8	21.7	17.4	14.8	10.2	9.00	4.86	2.08	1.43	1.05	0.89
1.85V	44.8	26.8	20.4	16.4	14.0	9.72	8.64	4.67	2.00	1.37	1.01	0.86

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR	48HR	72HR	100HR	120HR
1.60V	103.7	61.6	46.2	36.8	31.1	21.5	19.0	10.3	4.39	3.01	2.21	1.88
1.65V	102.8	61.0	45.8	36.4	30.9	21.3	18.8	10.2	4.36	2.98	2.19	1.87
1.70V	100.5	59.7	44.9	35.8	30.4	21.0	18.6	10.0	4.30	2.94	2.17	1.84
1.75V	97.4	58.1	43.8	35.0	29.8	20.6	18.3	9.87	4.22	2.89	2.13	1.81
1.80V	92.9	55.7	42.2	33.9	28.9	20.1	17.8	9.61	4.11	2.82	2.07	1.76
1.85V	86.4	52.1	39.7	32.1	27.6	19.2	17.1	9.23	3.95	2.71	1.99	1.69

The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

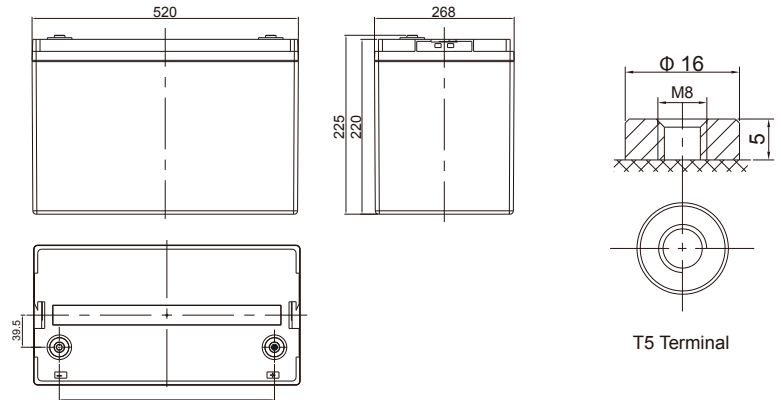
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Dimensions

Unit: mm

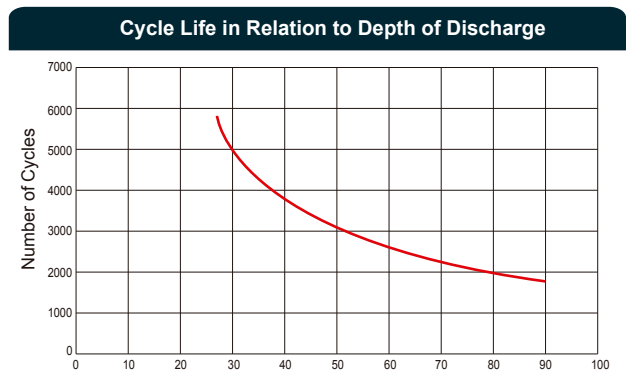
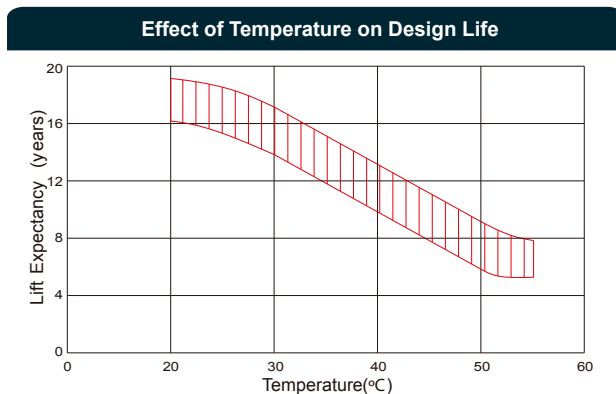
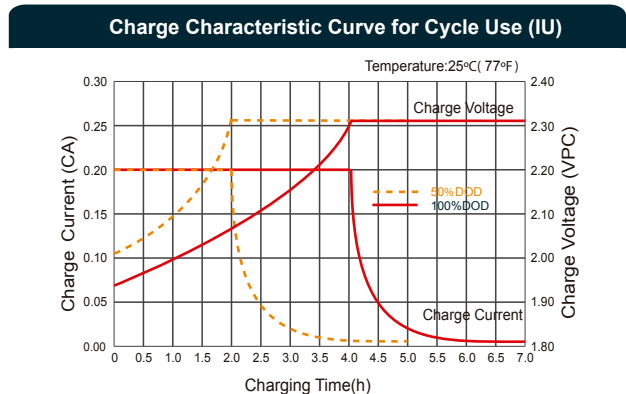
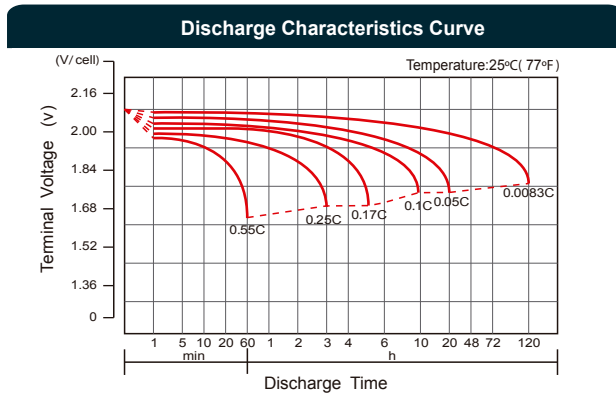
Length	520±2mm (20.4 inches)	
Width	268±2mm (10.5 inches)	
Height	220±2mm (8.63 inches)	
Total Height	225±2mm (8.82 inches)	
Terminal	Value	
M5	6~7	N*m
M6	8~10	N*m
M8	10~12	N*m



Reference Capacity

Hour Rate	C20 (Ah)	C72 (Ah)	C100 (Ah)	C120 (Ah)
F.V (V/Cell)	1.75	1.85	1.85	1.85
Capacity (Ah)	250.0	266.6	275.0	380.2

Characteristic Curve



Subject to revision without prior notice