

# GC-12 Series

Lead-Carbon Gel Battery

GC-12-120



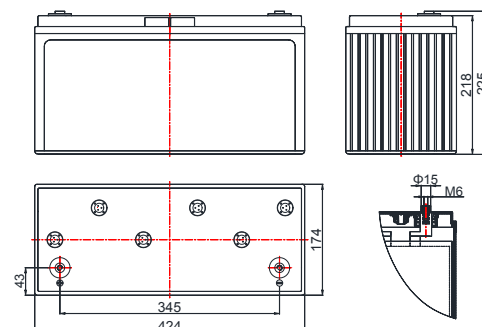
## Main Applications

- Renewable energy (wind & solar ) storage system
- UPS & emergency lighting system
- Military field, railway system, power system
- Fire alarm and security system
- Off-grid & bad-grid sites

## Benefits

- Design life is more than 12 years
- Superior deep cycling performance
- Lifetime maintenance free, Low annual operating cost, reduced TCO
- High security, reliability and stability

## Dimensions



## Technical Parameters

Nominal Voltage	12 V
Capacity	120 Ah @ 10hr to 1.80V per cell @ 25°C (77°F)
Weight	36.5 kg (80.47 lbs)
Dimensions	Length: 424 mm Width: 174 mm Height: 218 mm Total height: 225 mm
Internal Resistance (full charged)	Approx. 4.3 mΩ @ 25°C(77°F)
Short- circuit Current	744 A(5sec)
Self Discharge @25°C(77°F)	Less than 4% after 30 days storage
Operating Temperature Range	Discharge: -40°C~50°C(-40°F~122°F) Charge: -20°C~45°C(-4°F~113°F) Storage:-20°C~40°C(-4°F~104°F)
Recommended Operating Temperature	15°C~25°C (59°F~77°F)
Maximum Charging Current	36 A
Charging Voltage @25°C(77°F)	Float: 2.25 V/cell, Temps coefficient -3 mV/°C Equalize: 2.35 V/cell
Terminal	M6
Container Materials	ABS/ABS V0 (Optional)
Capacity Affected by Temperature(C <sub>10</sub> )	105% @ 40°C(104°F) 85% @ 0°C(32°F) 60% @ -20°C(-4°F)
Design Life @25°C(77°F)	12 years

## Attain Certificate

- ISO9001
- ISO14001
- ISO18001

## Technical Features

- Adopt lead- carbon gel technology
- Special gel electrolyte without flowing to avoid acid stratification and can prolong service life
- Excellent charging and discharging ability in low current
- High-purity electrolyte and special additives, low self-discharge

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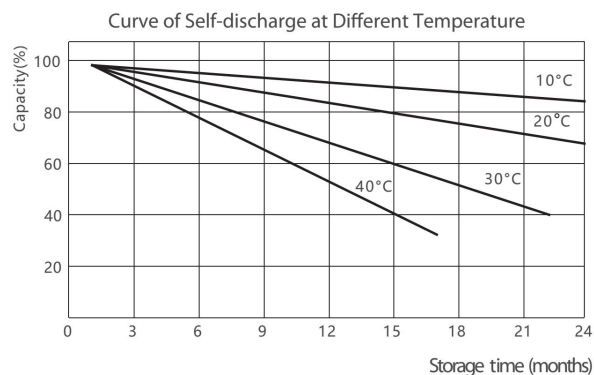
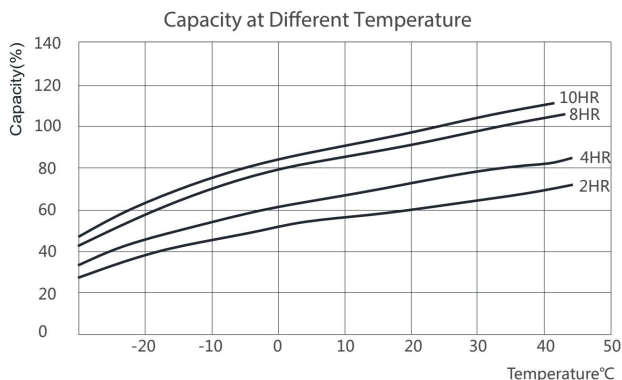
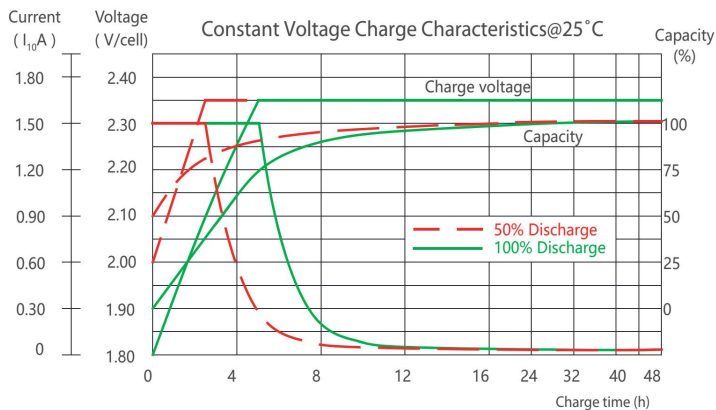
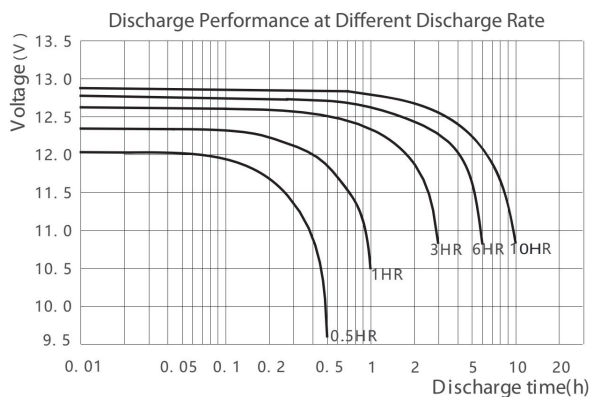
## Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	212	174	155	133	99.5	74.2	64.4	38.6	28.8	23.2	19.4	17.2	13.8	11.8	6.19
1.80V/cell	253	196	169	143	106	77.4	66.2	40.1	30.0	23.9	19.9	17.5	14.2	12.0	6.31
1.75V/cell	274	208	176	150	111	80.6	68.6	41.4	30.6	24.4	20.4	17.9	14.4	12.2	6.40
1.70V/cell	294	218	185	156	115	83.5	70.8	42.4	31.2	24.8	20.8	18.2	14.6	12.4	6.47
1.67V/cell	305	223	188	160	120	86.0	72.6	43.3	31.8	25.2	21.0	18.5	14.8	12.5	6.53
1.60V/cell	325	235	196	167	124	88.4	74.2	44.0	32.3	25.6	21.2	18.6	14.9	12.6	6.58

## Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	400	329	293	252	191	143	125	76.1	57.0	46.0	38.8	34.2	27.7	23.6	12.5
1.80V/cell	464	362	316	269	202	148	127	78.8	58.9	47.2	39.6	34.9	28.2	24.0	12.6
1.75V/cell	497	382	331	281	210	154	132	81.0	60.0	48.1	40.3	35.5	28.7	24.2	12.7
1.70V/cell	523	398	344	292	218	158	136	82.8	61.1	48.8	40.9	35.9	28.9	24.5	12.8
1.67V/cell	536	404	348	298	224	163	138	84.2	62.0	49.6	41.4	36.4	29.3	24.6	13.0
1.60V/cell	564	420	360	306	230	167	140	85.3	62.8	49.9	41.8	36.6	29.4	24.7	13.1

## Performance Curve



### \*Declaration:

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