

# GC-12 Series

Lead-Carbon Gel Battery

GC-12-200



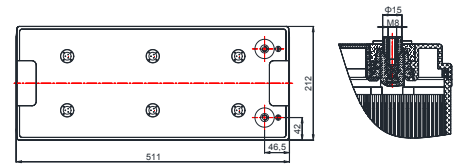
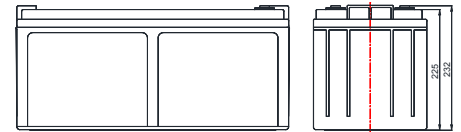
## Main Applications

- ▶ 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	200 Ah @ 10hr to 1.80V per cell @ 25°C (77°F)
Weight	58 kg (127.87 lbs)
Dimensions	Length: 511 mm Width: 212 mm Height: 225 mm Total height: 232 mm
Internal Resistance (full charged)	Approx. 3.0 mΩ @ 25°C(77°F)
Short- circuit Current	1240 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	60 A
Charging Voltage @25°C(77°F)	Float: 2.25 V/cell, Temps coefficient -3 mV/°C Equalize: 2.35 V/cell
Terminal	M8
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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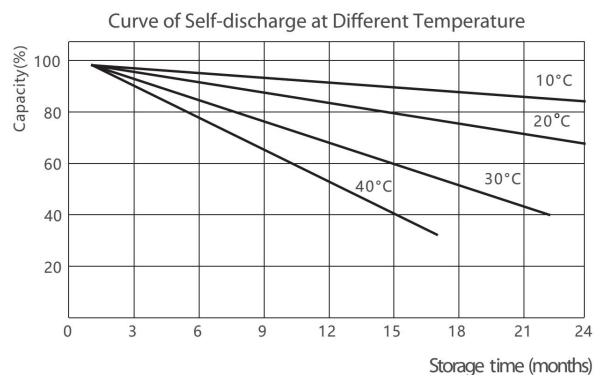
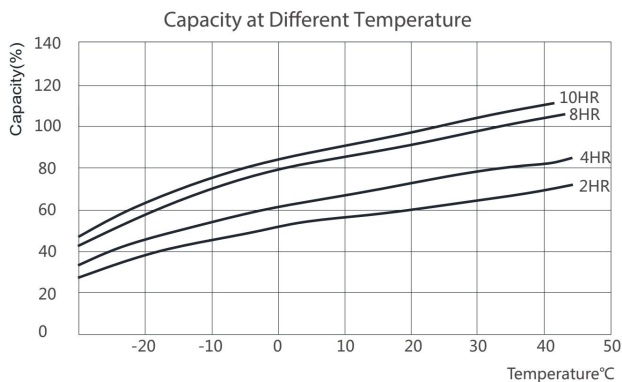
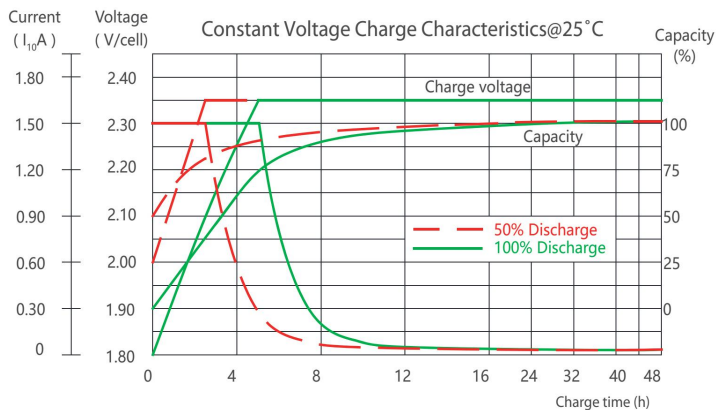
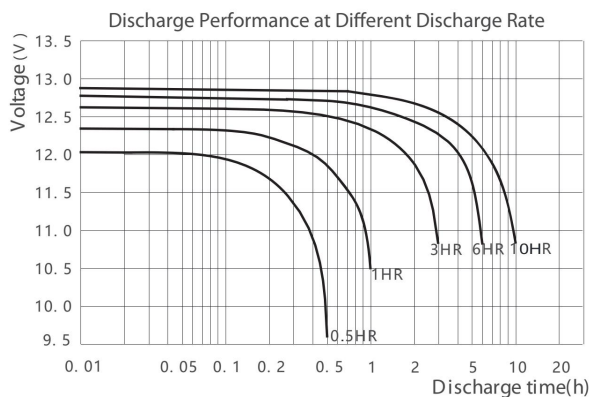
## Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	265	247	220	188	141	122	107	64.4	48.0	38.6	32.4	28.6	23.1	19.6	10.3
1.80V/cell	316	277	239	202	150	127	110	66.9	50.0	39.7	33.3	29.3	23.6	20.0	10.5
1.75V/cell	342	293	251	212	157	133	114	68.9	50.9	40.6	34.0	29.8	24.0	20.3	10.7
1.70V/cell	368	310	262	221	163	138	118	70.7	52.0	41.4	34.6	30.3	24.4	20.5	10.8
1.67V/cell	381	317	266	227	169	142	121	72.2	52.9	42.1	35.1	30.7	24.7	20.7	10.9
1.60V/cell	407	333	278	236	175	147	124	73.4	53.7	42.6	35.5	31.0	24.9	20.9	11.0

## 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	500	466	415	357	270	234	208	127	95.0	76.6	64.5	57.0	46.2	39.4	20.7
1.80V/cell	580	513	448	381	285	244	213	131	98.2	78.6	66.0	58.2	47.1	40.0	21.1
1.75V/cell	620	541	469	398	298	254	220	135	100	80.1	67.2	59.1	47.8	40.4	21.3
1.70V/cell	654	564	488	413	309	262	226	138	102	81.4	68.1	59.9	48.3	40.8	21.5
1.67V/cell	671	573	494	421	318	269	231	140	103	82.5	69.0	60.5	48.7	41.1	21.6
1.60V/cell	704	595	511	434	326	275	235	142	105	83.3	69.5	61.0	49.1	41.2	21.7

## Performance Curve



### \*Declaration:

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