

# GC-12 Series

Lead-Carbon Gel Battery

GC-12-300



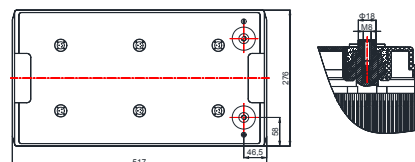
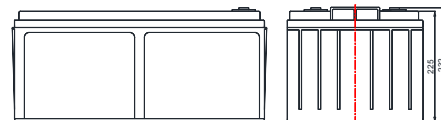
## Main Applications

- 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	300 Ah @ 10hr to 1.80V per cell @ 25°C (77°F)
Weight	84 kg (185.19 lbs)
Dimensions	Length: 517 mm Width: 276 mm Height: 225 mm Total height: 232 mm
Internal Resistance (full charged)	Approx. 2.2 mΩ @ 25°C(77°F)
Short- circuit Current	1860 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	90 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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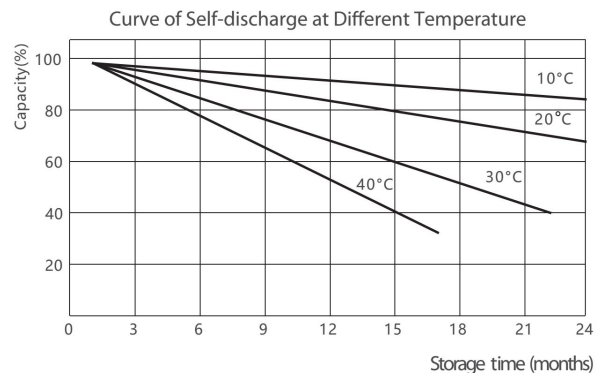
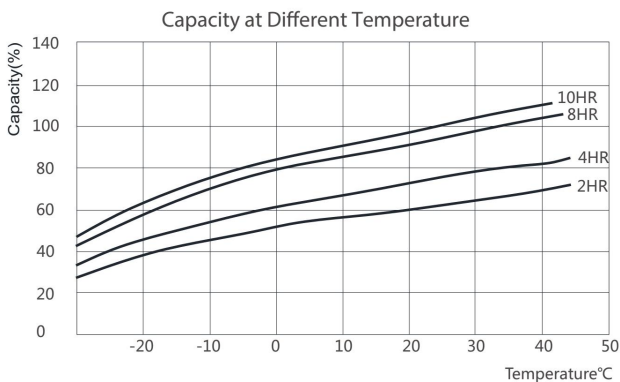
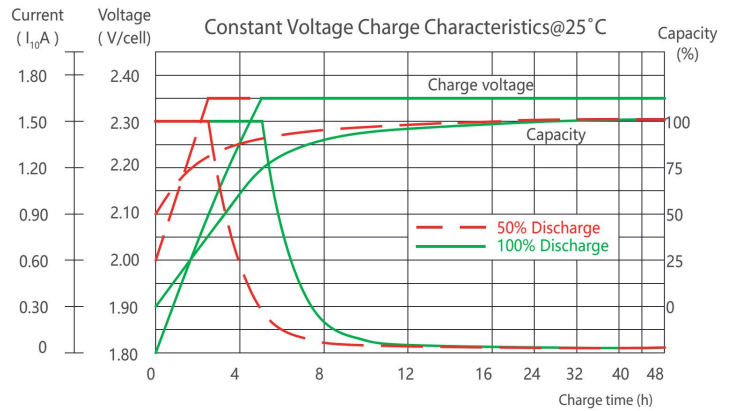
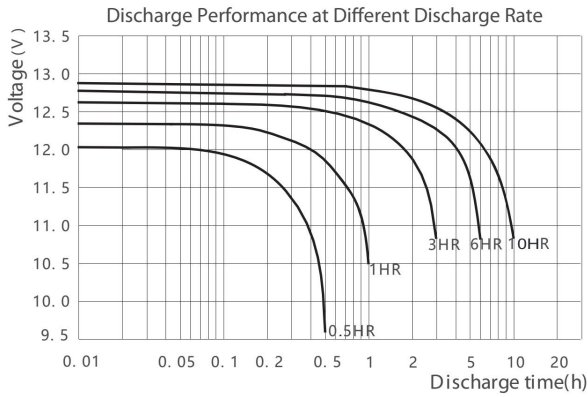
## Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	1hr	1.5hr	2hr	2.5hr	3hr	10hr
1.85V/cell	453	374	306	252	210	151	114	100	85.0	73.8	29.8
1.80V/cell	481	407	356	284	226	159	120	102	86.6	75.2	30.0
1.75V/cell	520	419	386	312	253	165	123	103	87.8	76.0	30.2
1.70V/cell	558	429	407	330	267	173	126	104	88.9	77.1	30.6
1.67V/cell	594	437	423	342	276	174	128	107	91.3	77.4	30.7
1.60V/cell	616	452	430	350	284	177	131	108	92.4	78.3	30.8

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

F.V/Time	5min	10min	15min	20min	30min	1hr	1.5hr	2hr	2.5hr	3hr	10hr
1.85V/cell	897	745	639	511	406	291	216	179	154	141	59.0
1.80V/cell	908	762	707	556	429	299	224	184	156	142	60.4
1.75V/cell	966	778	751	605	486	309	226	189	158	144	60.6
1.70V/cell	1038	829	800	629	496	319	229	194	159	148	61.7
1.67V/cell	1068	848	809	640	499	324	233	196	160	149	61.9
1.60V/cell	1100	857	815	645	504	330	236	200	161	150	62.1

## Performance Curve



### \*Declaration:

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