

# GC-12 Series

Lead-Carbon Gel Battery

GC-12-150



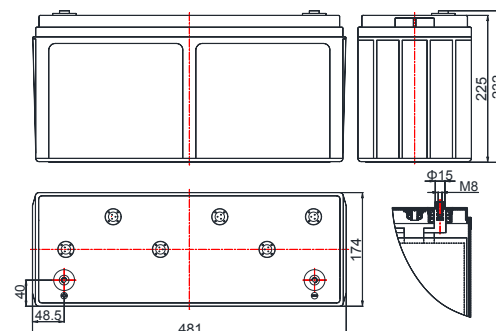
## Main Applications

- ▶ 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	150 Ah @ 10hr to 1.80V per cell @ 25°C (77°F)
Weight	44 kg (97 lbs)
Dimensions	Length: 481 mm Width: 174 mm Height: 225 mm Total height: 232 mm
Internal Resistance (full charged)	Approx. 3.4 mΩ @ 25°C(77°F)
Short- circuit Current	930 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	45 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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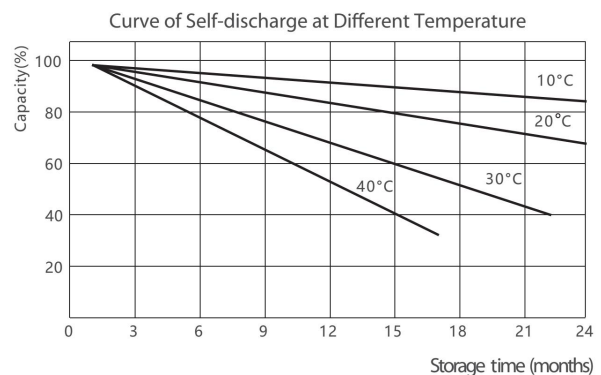
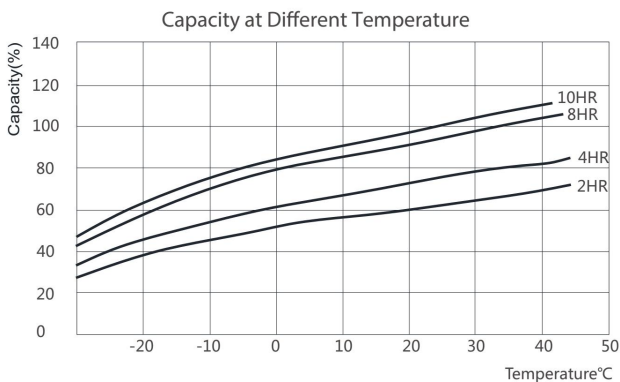
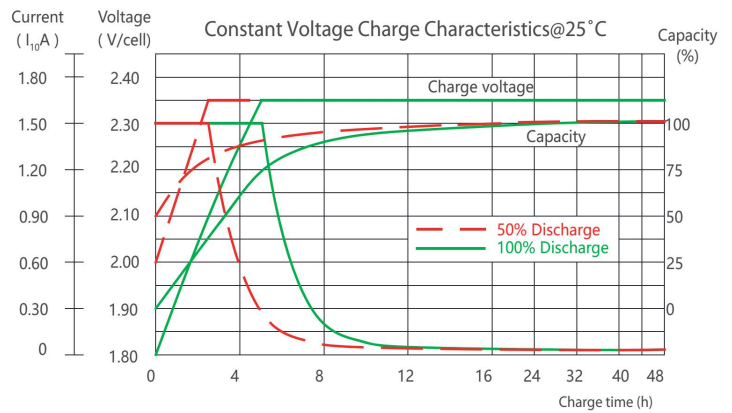
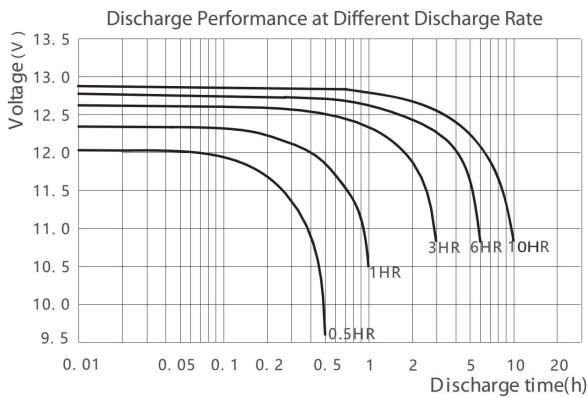
## Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	225	207	184	158	118	88.1	80.6	48.3	36.0	28.9	24.3	21.4	17.3	14.7	7.71
1.80V/cell	269	232	200	169	125	91.9	82.8	50.2	37.5	29.8	25.0	21.9	17.7	15.0	7.90
1.75V/cell	291	246	210	178	132	95.8	85.8	51.7	38.2	30.5	25.5	22.4	18.0	15.2	8.03
1.70V/cell	313	260	220	185	137	99.2	88.5	53.0	39.0	31.1	25.9	22.7	18.3	15.4	8.10
1.67V/cell	324	266	223	190	142	102	90.7	54.1	39.7	31.6	26.3	23.0	18.5	15.6	8.21
1.60V/cell	346	279	233	197	147	105	92.7	55.1	40.3	32.0	26.6	23.3	18.7	15.7	8.28

## 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	425	391	348	300	226	169	156	95.2	71.2	57.4	48.4	42.8	34.7	29.6	15.6
1.80V/cell	493	430	375	320	239	176	160	98.5	73.6	58.9	49.5	43.6	35.3	30.0	15.8
1.75V/cell	527	453	393	334	250	183	165	101	75.0	60.1	50.4	44.3	35.8	30.3	16.0
1.70V/cell	556	473	409	347	259	189	169	103	76.4	61.0	51.1	44.9	36.2	30.6	16.1
1.67V/cell	570	480	414	353	267	194	173	105	77.6	61.9	51.7	45.4	36.6	30.8	16.2
1.60V/cell	599	499	428	364	274	198	176	107	78.4	62.5	52.1	45.8	36.8	30.9	16.3

## Performance Curve



### \*Declaration:

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