

GC-12 Series

Lead-Carbon Gel Battery

GC-12-85



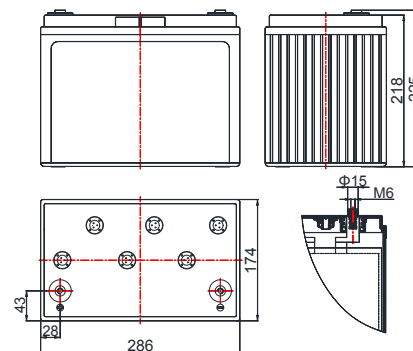
Main Applications

- 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	85 Ah @ 10hr to 1.80V per cell @ 25°C (77°F)
Weight	26 kg (57.32 lbs)
Dimensions	Length: 286 mm Width: 174 mm Height: 218 mm Total height: 225 mm
Internal Resistance (full charged)	Approx. 4.7 mΩ @ 25°C(77°F)
Short- circuit Current	527 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	25.5 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 ₁₀)	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

GC-12 Series

Lead-Carbon Gel Battery

GC-12-85



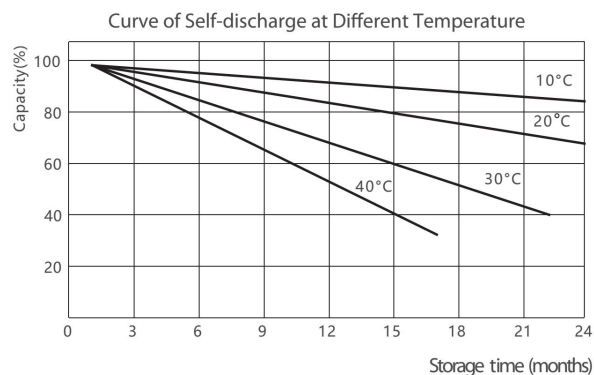
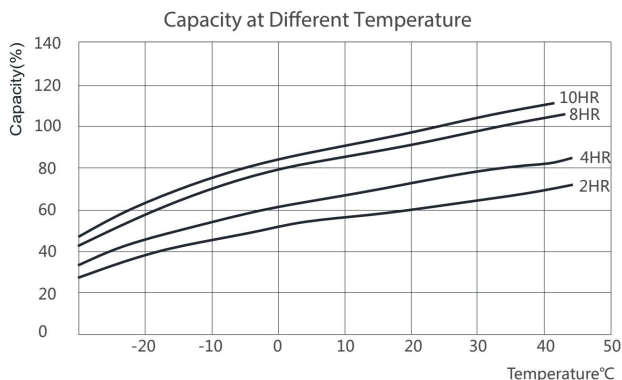
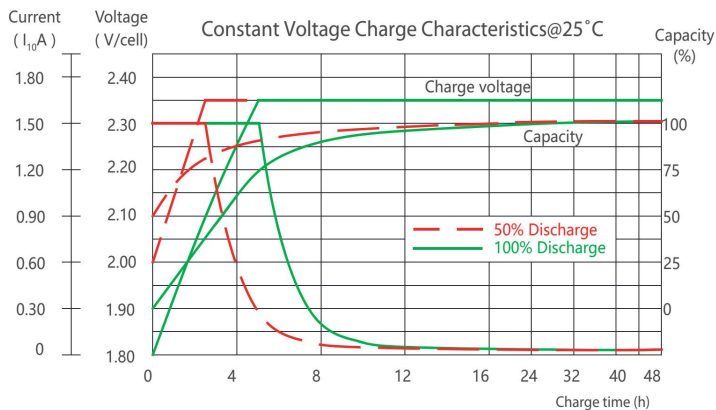
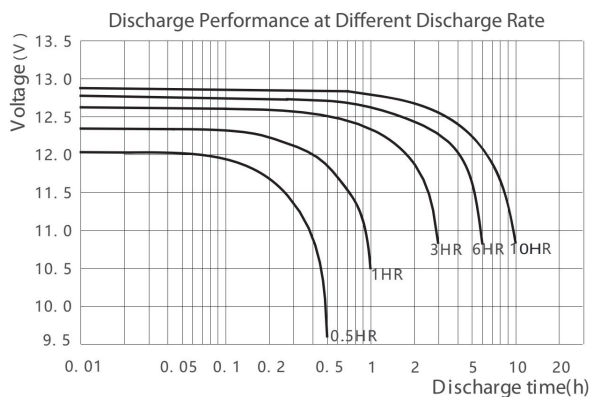
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	150	124	110	94.0	70.4	52.6	45.7	27.4	20.4	16.4	13.8	12.1	9.82	8.35	4.38
1.80V/cell	179	138	120	101	74.8	54.8	46.9	28.4	21.3	16.9	14.1	12.4	10.0	8.52	4.47
1.75V/cell	194	147	125	106	78.5	57.1	48.6	29.3	21.6	17.3	14.4	12.7	10.2	8.63	4.53
1.70V/cell	208	155	131	110	81.7	59.2	50.2	30.0	22.1	17.6	14.7	12.9	10.4	8.73	4.58
1.67V/cell	216	158	133	113	84.7	60.9	51.4	30.7	22.5	17.9	14.9	13.0	10.5	8.81	4.63
1.60V/cell	231	167	139	118	87.6	62.6	52.5	31.2	22.8	18.1	15.1	13.2	10.6	8.86	4.66

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	283	233	208	179	135	101	88.2	53.9	40.4	32.5	27.4	24.2	19.7	16.7	8.81
1.80V/cell	329	257	224	191	142	105	90.4	55.8	41.7	33.4	28.0	24.7	20.0	17.0	8.96
1.75V/cell	352	270	234	199	149	109	93.4	57.4	42.5	34.0	28.6	25.1	20.3	17.2	9.05
1.70V/cell	371	282	244	207	154	113	96.0	58.6	43.3	34.6	28.9	25.4	20.5	17.3	9.12
1.67V/cell	380	286	247	211	159	115	98.1	59.7	44.0	35.1	29.3	25.7	20.7	17.4	9.19
1.60V/cell	399	298	255	217	163	118	100	60.5	44.4	35.4	29.5	25.9	20.8	17.5	9.22

Performance Curve



*Declaration:

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact CHINASHOTO for the latest information.

Welcome to Visit : www.chinashoto.com