

GC-12 Series

Lead-Carbon Gel Battery

GC-12-250



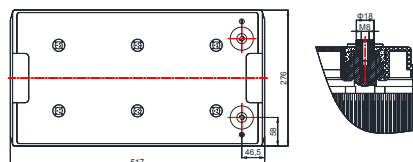
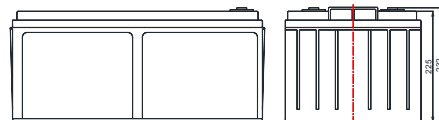
Main Applications

- 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	250 Ah @ 10hr to 1.80V per cell @ 25°C (77°F)
Weight	77 kg (169.75 lbs)
Dimensions	Length: 517 mm Width: 276 mm Height: 225 mm Total height: 232 mm
Internal Resistance (full charged)	Approx. 2.4 mΩ @ 25°C(77°F)
Short- circuit Current	1550 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	75 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 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

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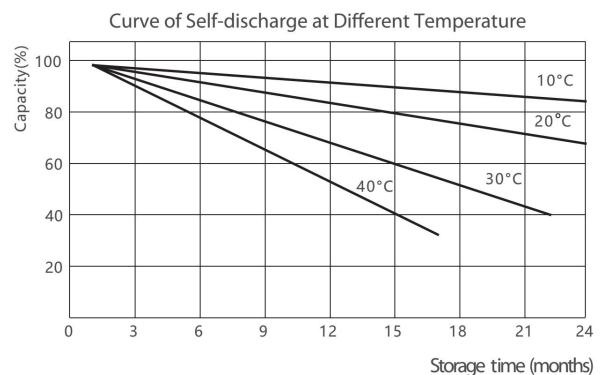
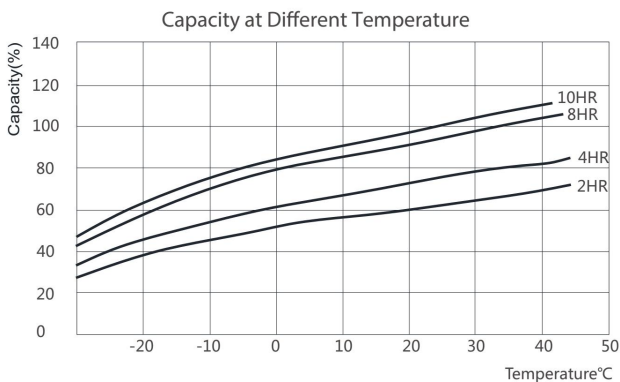
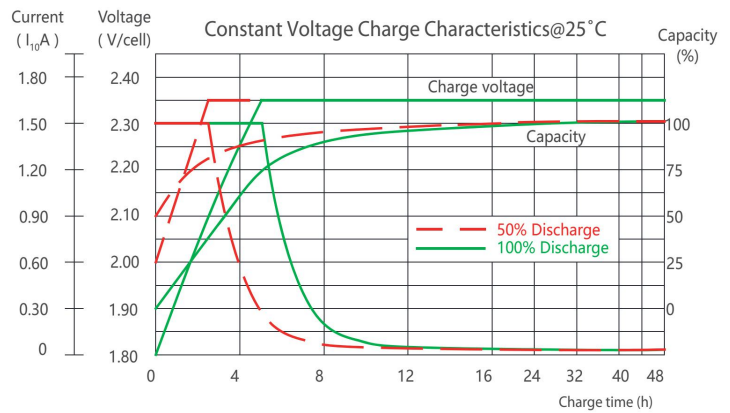
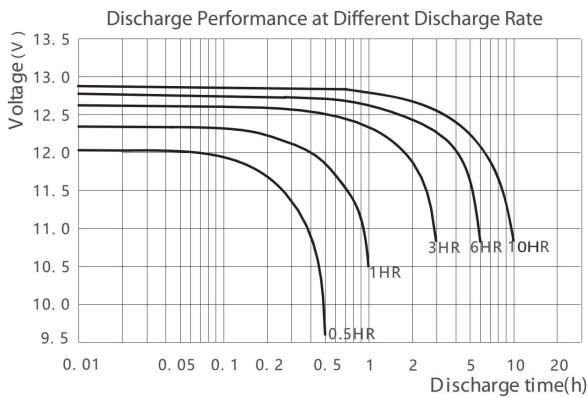
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	325	303	270	230	173	149	131	80.5	60.0	48.3	40.5	35.8	28.9	24.5	12.9
1.80V/cell	387	339	293	247	184	156	135	83.6	62.5	49.6	41.6	36.6	29.5	25.0	13.1
1.75V/cell	419	359	307	260	192	163	140	86.1	63.6	50.8	42.5	37.3	30.0	25.4	13.4
1.70V/cell	451	380	321	271	200	169	145	88.4	65.0	51.8	43.3	37.9	30.5	25.6	13.5
1.67V/cell	467	388	326	278	207	174	148	90.3	66.1	52.6	43.9	38.4	30.9	25.9	13.6
1.60V/cell	499	408	341	289	214	180	152	91.8	67.1	53.3	44.4	38.8	31.1	26.1	13.8

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	613	571	508	437	331	287	255	159	119	95.8	80.6	71.3	57.8	49.3	25.9
1.80V/cell	711	628	549	467	349	299	261	164	123	98.3	82.5	72.8	58.9	50.0	26.4
1.75V/cell	760	663	575	488	365	311	270	169	125	100	84.0	73.9	59.8	50.5	26.6
1.70V/cell	801	691	598	506	379	321	277	173	128	102	85.1	74.9	60.4	51.0	26.9
1.67V/cell	822	702	605	516	390	330	283	175	129	103	86.3	75.6	60.9	51.4	27.0
1.60V/cell	862	729	626	532	399	337	288	178	131	104	86.9	76.3	61.4	51.5	27.1

Performance Curve



*Declaration:

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