

## SPECIFICATION: CG12-200XA (12V200Ah)

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Gel battery shows some distinctive advantages over flooded battery or AGM battery, such as super thermal stability, high deep discharge capability, good recovery from deep discharge, even if the battery is left discharged for thirty days, it will still recover to 100% of capacity. With the above-mentioned advantages, the gel battery has long service life, is specially suitable for motive power applications, such as golf trailer, scrubber, forklift, etc. The deep discharge cycles increased 50% as compared with the AGM battery.

### GENERAL FEATURES

- l Micro millimeter SiO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> gelled electrolyte technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- l Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- l UL-recognized component.
- l Can be mounted in any orientation.
- l Computer designed lead, calcium tin alloy grid for high power density.
- l Long service life, float or cyclic applications.
- l Maintenance-free operation.
- l Low self discharge.
- l Case and cover available in both standard and flame retardant ABS.
- l Design Life 12 years

### CONSTRUCTION

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Gelled acid

### TECHNOLOGY PARAMETER

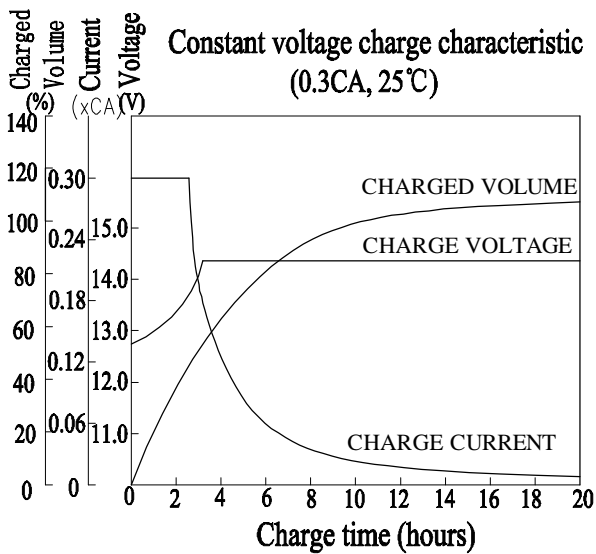
Battery model	CG12-200XA			
Nominal voltage	12V			
Number of cell	6			
Capacity (25°C)	20hR(10.25A, 10.5V)	10hR(20.0A, 10.8V)	5hR(36.0A, 10.5V)	1hR(131A, 9.60V)
	205Ah	200Ah	180Ah	131Ah
Dimensions Max.	Length	Width	Height	Total Height
	522±1 mm	238±1 mm	218±1 mm	223±1 mm
Approx. weight	65Kg (143.3 lbs)			
Internal resistance	Full charged at 25°C: 3.6mOhms			
Self discharge	3% of capacity declined per month at 20°C (average)			
Operating temperature range	Discharge	Charge	Storage	
	-20~60°C	-10~60°C	-20~60°C	
Max. discharge current (25°C)	1000A (5s)			
Short circuit current	3300A			

**Constant current discharge rating-amperes at 25°C(77 °F)**

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	507	405	332	223	131	53.9	40.2	20.4	10.55
1.65V	481	386	317	214	126	52.1	38.7	20.3	10.50
1.70V	453	366	301	205	122	50.3	37.5	20.2	10.45
1.75V	427	346	287	195	116	48.6	36.0	20.1	10.40
1.80V	399	324	270	184	110	46.2	34.3	20.0	10.25

**Constant power discharge rating-watts per cell at 25°C(77 °F)**

End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	865	708	575	398	300	239	133	97.9	71.0
1.65V	831	684	558	388	293	234	131	96.1	70.9
1.70V	797	659	539	377	286	229	128	94.3	69.8
1.75V	762	633	521	364	276	222	125	92.6	68.8
1.80V	725	605	498	350	267	215	120	89.4	67.7



**CHARGE METHODS: Constant voltage charging at 25°C**

Standby use: No charge current limit is required

Charge voltage: 13.38--13.68Volts

Cyclic use: Maximum charge current: 30% of rated capacity

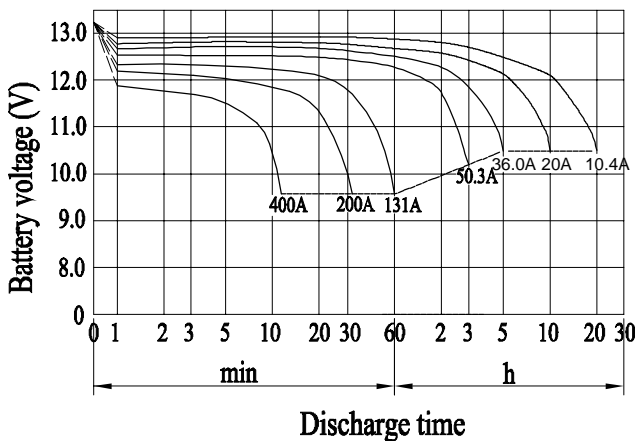
Charge voltage: 14.28--14.52Volts

Temperature compensation:

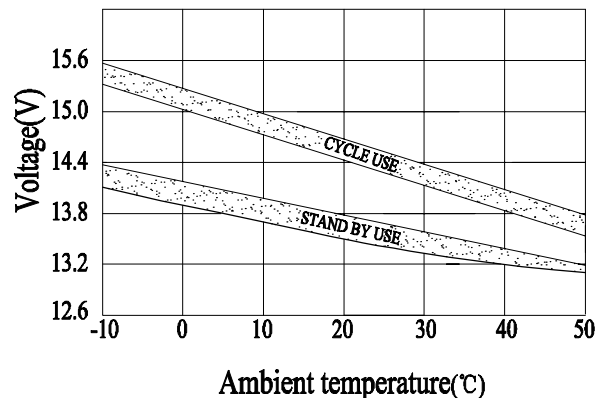
Standby use: -20mV/°C

Cyclic use: -30mV/°C.

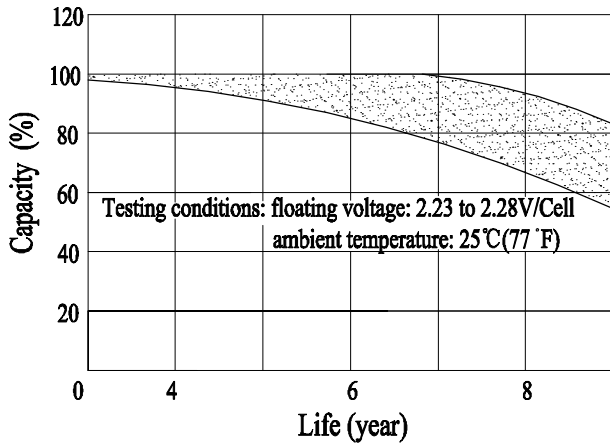
**Discharge characteristic (25°C)**



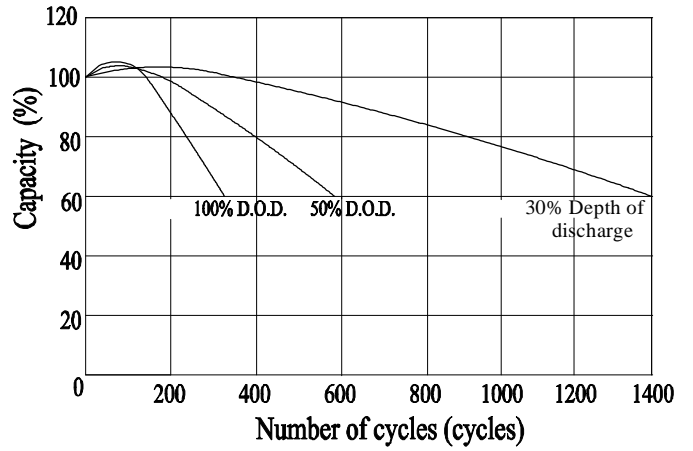
**Relationship between charge voltage and temperature**



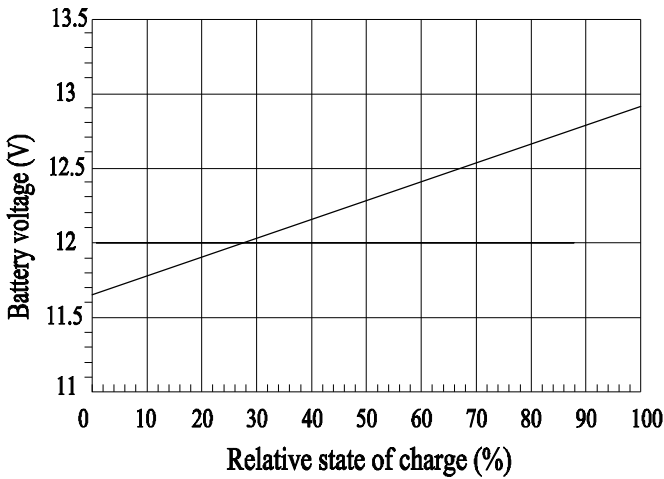
Life characteristics of standby use



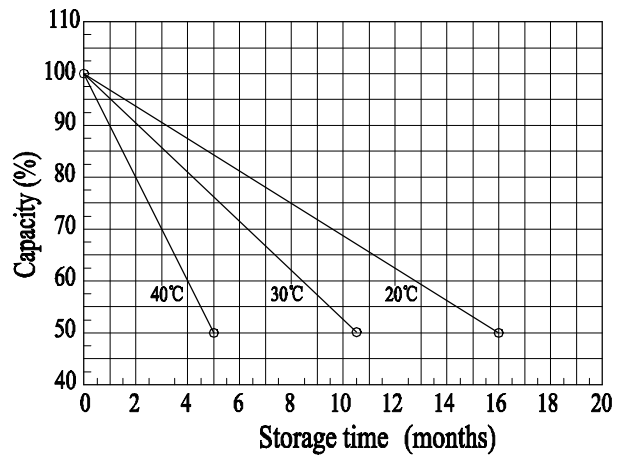
Cycle service life in relation to depth of discharge



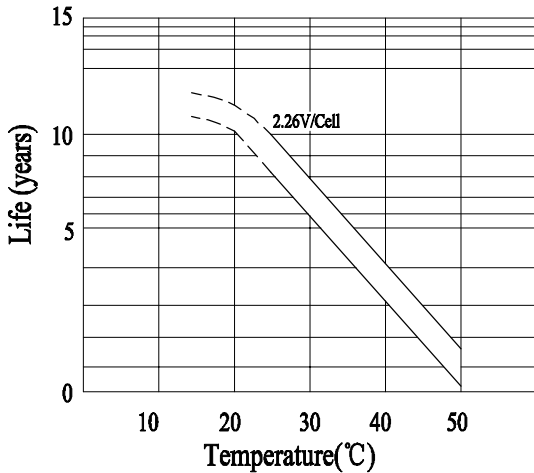
Relationship of OCV and state of charge (25°C)



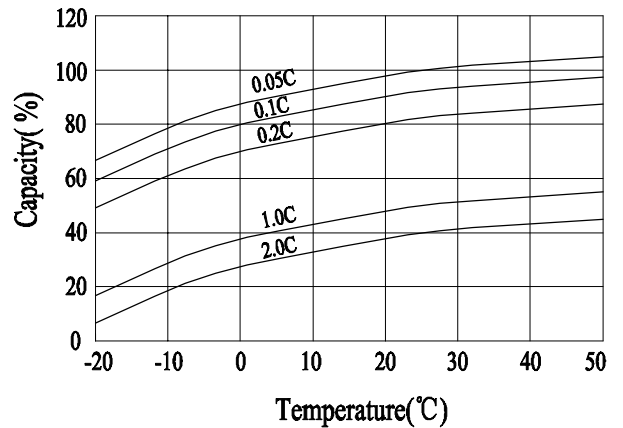
Self-discharge characteristic



Temperature effects on float life



Temperature effects on capacity



**Battery and terminal dimensions**

