

SBM12DG200 (12V200AH)

Power Solar Gel Battery



Solar Gel Deep Cycle

Solar gel Series

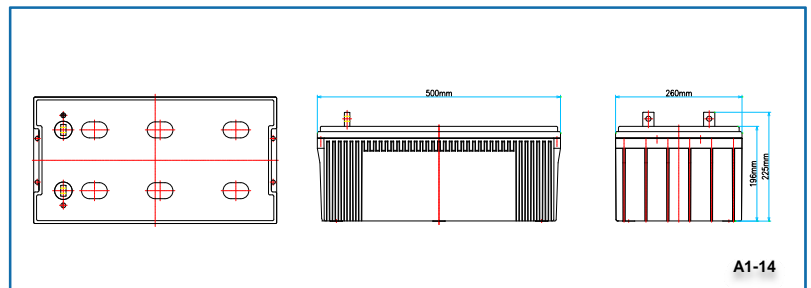
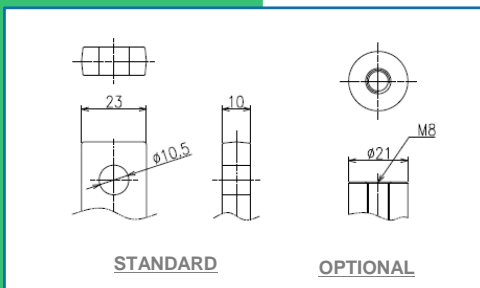
Maxima Solar gel batteries are true maintenance-free sealed batteries engineered specially to satisfy the need for frequent deep cycles from PVs and renewable energy storage applications. We are confident that our technology-intensive, long-lasting, and environment friendly DG batteries will provide stability and efficiency for your everyday renewable energy needs.

General feature

Plate	Paste type
Battery type	Sealed and Maintenance free operation
Structure	Nonspillable construction design
Container/cover	ABS resin (Optional Flame retardant, UL94-V0)
Safety	Safety valve installation for explosion proof.
High quality and high reliability and low self discharge characteristic	
Exceptional deep discharge recovery performance	
Flexibility design for multiple install positions (Position Free)	

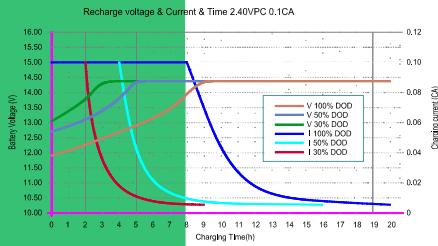


*** The color and the printed specifications of the products are subject to change without prior notice.

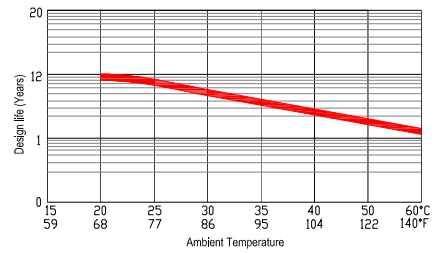


Battery model	SBM12DG200 (12V200AH / 20 HOUR RATE)			
Capacity (@25°C)	20HR (1.80VPC)	10HR (1.75VPC)	5HR (1.70VPC)	1HR (1.60VPC)
	200Ah	190Ah	174Ah	132Ah
Dimensions (mm/inch)	Length	Width	Height	Total Height
	500(19.69)	260(10.24)	196(7.72)	225(8.86)
Weight (kg/lbs)	57.0kg(132.3lbs) ± 5%			
Internal resistance (mΩ)	3.2mΩ ± 10% (25°C, 77°F)			
Max. discharge current (5sec)	1,520 A	Max. discharge current(continuous)		570 A
Capacity affected by Temperature	@30°C(86°F)	@25°C(77°F)	@10°C(50°F)	@-10°C(14°F)
	105%	103%	95%	78%
Self discharge (@25°C, 77°F)	After 1 month 3%		After 3 month 8%	After 6 month 15%
Max. short duration discharge current (0.1sec)	3,800A ± 10%			
Recommended charging (@25°C)	Cycle use		Floating use	
	2.40~2.45V/cell (± 5.5mV/°C/Cell) / 80.0A max.		2.20~2.24V/cell (± 3.3mV/°C/cell)	

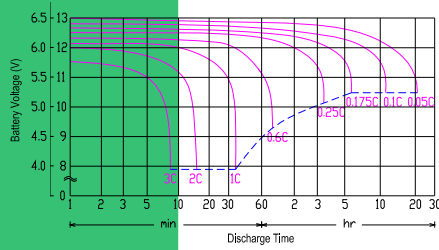
DOD % vs Recharging time curve



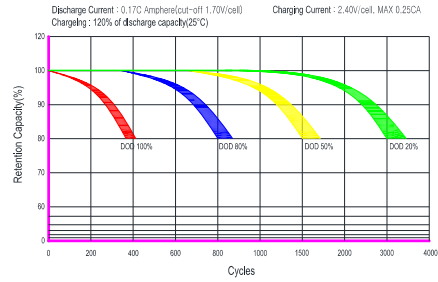
Floating life characteristics



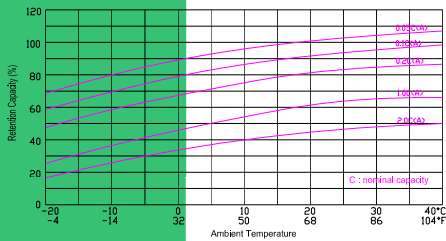
Discharge time vs current



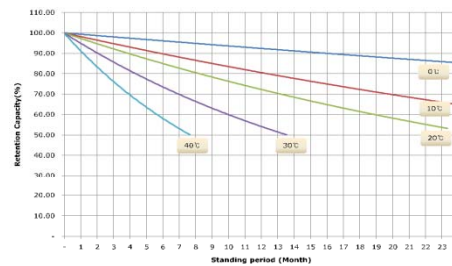
Cycle life characteristics



Effect of temperature on capacity



Self discharge



- 01 Long Life**
- 02 Maintenance Free**
- 03 Leak free**
- 04 Safety**

High density, anti-corrosive lead calcium alloy is used in harmony with the GEL electrolyte to reduce the sulfation effect significantly.

Maxima Battery has a gas re-combining design that doesn't need maintenance until the end of its life.

Gel Technology is applied to prevent leakage. They won't spill even if the battery is tipped upside down.

Specially designed anti-explosion filter and safety valves prevent gas leakage when overcharged.

Constant current discharge ratings – Amperes per cell @ 25°C

V/cell	Minutes						Hours					
	5	10	15	20	30	40	1	3	5	8	10	20
1.90V	377	313	292	237	196	166	118	46.9	29.4	20.0	17.0	9.27
1.85V	449	345	336	271	218	185	121	48.7	30.5	20.9	17.7	9.64
1.80V	523	412	361	288	224	191	122	50.6	31.2	21.6	18.3	10.0
1.75V	564	435	375	296	228	197	123	52.5	32.1	22.2	18.6	10.2
1.70V	609	457	389	302	231	198	123	53.4	33.8	22.9	19.4	10.5
1.65V	628	466	394	308	234	199	124	55.3	34.4	23.8	20.1	10.9
1.60V	646	476	397	310	234	199	125	56.2	35.5	24.4	20.6	11.3

Constant power discharge ratings – Watts per cell @ 25°C

V/cell	Minutes						Hours					
	5	10	15	20	30	40	1	3	5	8	10	20
1.90V	731	607	566	459	386	327	233	92.3	57.8	40.0	34.0	18.5
1.85V	871	670	651	527	429	365	238	96.0	60.0	41.8	35.4	19.3
1.80V	1015	799	700	558	441	376	240	100	61.5	43.3	36.5	20.0
1.75V	1094	844	728	575	450	387	242	103	63.3	44.4	37.3	20.4
1.70V	1181	886	754	587	456	390	243	105	66.6	45.8	38.7	21.1
1.65V	1219	904	765	597	461	391	244	109	67.7	47.7	40.2	21.8
1.60V	1253	923	771	601	461	392	246	111	69.9	48.8	41.3	22.5