

SBM12DG150 (12V150AH)

Power Solar Gel Battery



Solar Gel Deep Cycle

Solar gel Series

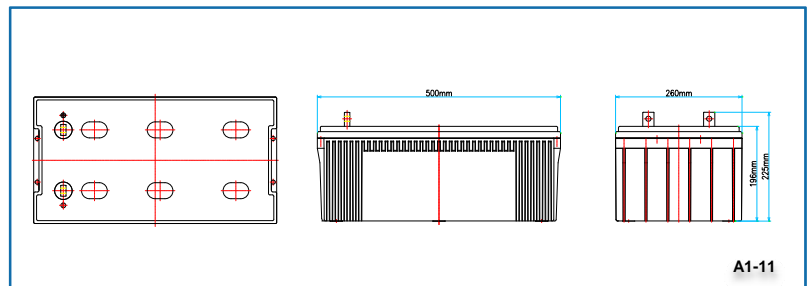
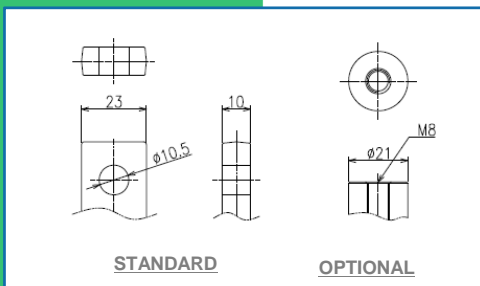
Maxima Solar gel batteries are true maintenance-free sealed batteries engineered specially to satisfy the need for frequent deep cycles from PVs and renewable energy storage applications. We are confident that our technology-intensive, long-lasting, and environment friendly DG batteries will provide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

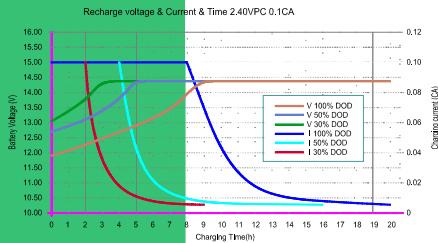


*** The color and the printed specifications of the products are subject to change without prior notice.

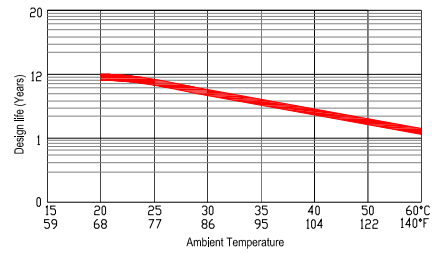


Battery model	SBM12DG150 (12V150AH / 20 HOUR RATE)			
Capacity (@25°C)	20HR (1.80VPC)	10HR (1.75VPC)	5HR (1.70VPC)	1HR (1.60VPC)
	150Ah	143Ah	131Ah	99Ah
Dimensions (mm/inch)	Length	Width	Height	Total Height
	500(19.69)	260(10.24)	196(7.72)	225(8.86)
Weight (kg/lbs)	43.0kg(108lbs) ± 5%			
Internal resistance (mΩ)	3.5mΩ ± 10% (25°C, 77°F)			
Max. discharge current (5sec)	1,140 A	Max. discharge current(continuous)		450 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)	2,860A ± 10%			
Recommended charging (@25°C)	Cycle use		Floating use	
	2.40~2.50V/cell (± 5.5mV/°C/Cell) / 60.0A max.		2.20~2.24V/cell (± 3.3mV/°C/cell)	

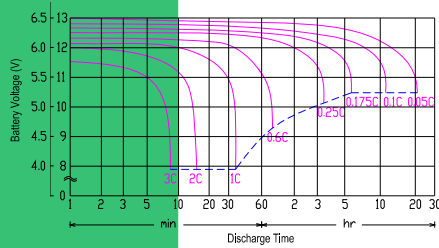
DOD % vs Recharging time curve



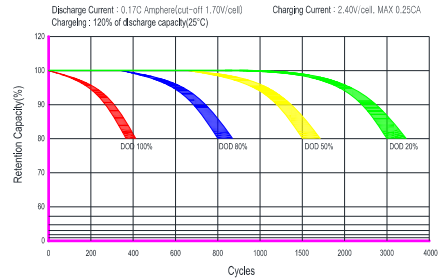
Floating life characteristics



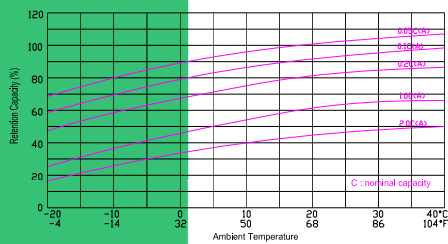
Discharge time vs current



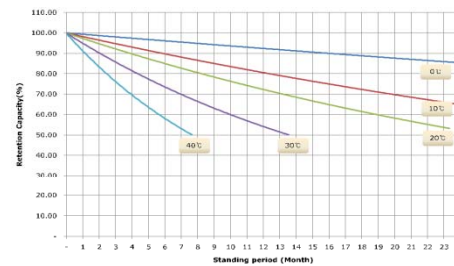
Cycle life characteristics



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	283	235	219	178	146.9	124.5	88.6	35.1	22.0	15.0	12.7	6.95
1.85V	337	259	252	204	163	139	90.8	36.5	22.9	15.7	13.3	7.23
1.80V	392	309	271	216	168	143	91.5	38.0	23.4	16.2	13.7	7.50
1.75V	423	326	281	222	171	147	92.2	39.4	24.1	16.6	14.0	7.64
1.70V	457	342	292	227	173	149	92.6	40.1	25.4	17.2	14.5	7.91
1.65V	471	350	296	231	175	149	93.0	41.5	25.8	17.9	15.1	8.18
1.60V	484	357	298	232	176	149	93.6	42.2	26.6	18.3	15.5	8.45

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	548	455	425	345	289	245	175	69.2	43.4	30.0	25.5	13.9
1.85V	653	503	488	395	322	273	179	72.0	45.0	31.4	26.6	14.5
1.80V	761	599	525	419	330	282	180	74.8	46.1	32.5	27.4	15.0
1.75V	821	633	546	431	338	290	182	77.5	47.5	33.3	27.9	15.3
1.70V	886	664	566	440	342	293	182	78.9	50.0	34.4	29.0	15.8
1.65V	914	678	574	448	345	293	183	81.7	50.8	35.8	30.1	16.4
1.60V	940	693	578	451	346	294	184	83.1	52.4	36.6	31.0	16.9