

# SG2-300 2V 300Ah(10hr)

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 three days, it will recover to 100% of capacity. With the above-mentioned advantages, the gel battery has long service life, specially suitable for motive power applications, such as golf trailer, sruubber, folklift, etc. The deep discharge cycles increased 50% as compared with the AGM battery.

## Battery Construction

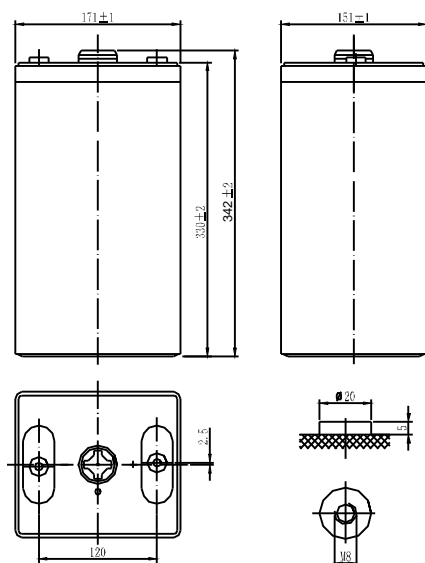
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	PVC	Gelled acid

## General Features

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

## Dimensions and Weight

Length(mm / inch) .....171 / 6.73  
 Width(mm / inch) .....151 / 5.94  
 Height(mm / inch) .....330 / 13.0  
 Total Height(mm / inch) .....364 / 14.3  
 Approx. Weight(Kg / lbs) .....20 / 44.1



Total height with removeable cover: 364

## Performance Characteristics

Nominal Voltage	2V
Number of cell	1
Design Life	20 years
Nominal Capacity 77°F(25°C)	
10 hour rate (30.0A, 1.80V)	300Ah
5 hour rate (52.8A, 1.75V)	264Ah
1 hour rate (186A, 1.6V)	186Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	0.75mOhms
Self-Discharge	
2% of capacity declined per month at 20°C(average)	
Operating Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	1200A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use Charge Voltage:	2.40V-2.45V
Maximum charging current	60A
Temperature compensation	-5mV/°C
Standby use	2.25V-2.30V
No charge current limit is required	
Temperature compensation	-3.3mV/°C

## Discharge Constant Current (Amperes at 77°F25°C)

End point volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	630	516	300	186	78.0	57.0	31.5	16.8
1.65V	594	480	294	180	76.0	55.2	31.2	16.5
1.70V	558	456	288	174	74.0	54.0	30.6	16.2
1.75V	522	420	282	168	73.0	52.8	30.3	16.1
1.80V	486	384	270	159	70.0	51.0	30.0	15.8

## Discharge Constant Power (Watts at 77°F25°C)

End point volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	1079	875	562	348	146	109	61.0	33.1
1.65V	1026	868	536	331	139	103	55.4	31.2
1.70V	1000	832	511	317	131	98.5	54.3	29.8
1.75V	952	780	496	306	125	96.3	52.4	28.8
1.80V	902	737	475	293	118	89.8	49.0	27.7

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

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