NG2-300

2V300Ah / 20hr rate

BATTERY Genergy

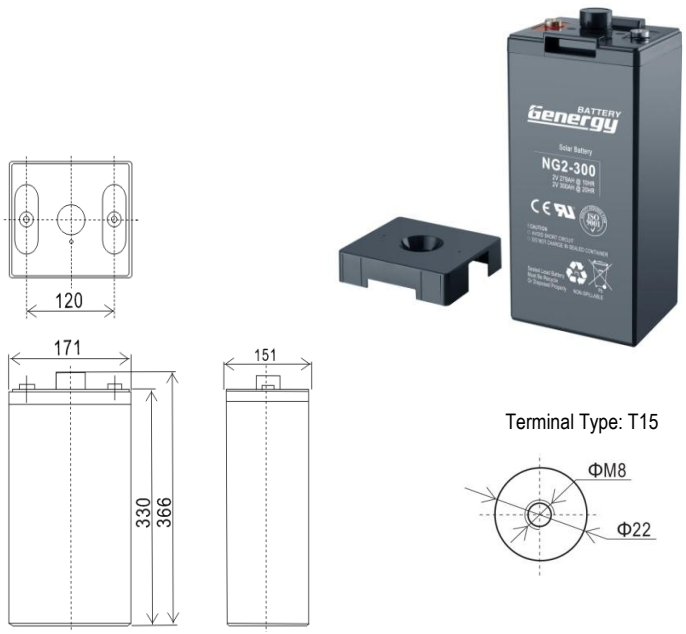
Introduction

Genergy NG (2 Volt) series is designed for solar and other renewable energy system applications with a 15 years design life. The series battery is a genuine Gelled electroltye valve regualted product. Featured of its performance is an enhanced cycle life in comparison to traditional AGM products.

Battery Features

- ○ Completed maintainance free
- ○ Electrolyte will not stratify, no equalization charge required.
- ○ Enhanced cycle life
- ○ Genuine Gelled thixotropic electroltye (Silicon Gel)
- ○ Increase durability and deep cycle ability for heavy demand applications
- ○ Low self-discharge
- ○ Fully tank formed plates
- ○ Low impurity electrolyte
- ○ Spill proof / leak proof
- ○ Multi-position usage
- ○ ABS case and cover VO upon request

Battery Picture & Terminal Layout



Total height with removable cover:366

Electrical Specification

Design floating Life @ 25°C (77°F)	15 years
Nominal Capacity @ 25°C /77°F	
20 hour rate 15.05A to 1.75Vpc	301Ah
10 hour rate 29.35A to 1.75Vpc	293Ah
Internal Resistance	
(Fully charged battery @ 25°C /77°F)	1.0 mΩ
Max. Discharge Current @ 25°C /77°F	1500 A (5S)
Charge Methods: Constant voltage charge @ 25°C /77°F	
Cycle Use	2.45 ~ 2.49V
Max. Current	75 A
Standby Use	2.25 ~ 2.30V
Operating Temperature Range	-30 ~ 50°C

Notes: battery voltage must be adjusted according to temperature. Please refer to our recommendation.

Self-Discharge

<3% of capacity declined per month @ 25°C (77°F).

Dimension & Weight

Dimension (± 2mm)				Weight
Length	Width	Height	Total Height	(± 2%)
171 mm	151 mm	330 mm	366 mm	19.4 kg
6.7 inch	5.9 inch	13.0 inch	14.4 inch	42.8 lbs

Typical Applications

- ○ Solar Energy System
- ○ Wind Energy System
- ○ Power Utility
- ○ UPS/EPS
- ○ BTS system
- ○ Data Center

Constant Current Discharge (Amperes @ 25°C /77°F)

V/cell	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1hr	2hr	3hr	4hr	5hr	10hr	20hr
1.60	534.0	437.7	396.7	349.8	315.0	283.0	266.1	248.9	234.2	220.8	214.7	116.90	82.82	68.84	56.28	30.07	15.19
1.65	507.1	415.6	378.7	336.4	306.7	275.5	259.5	243.2	229.4	217.0	211.8	114.65	81.23	67.40	54.99	29.93	15.19
1.70	486.2	398.5	363.8	324.0	297.0	266.4	251.1	235.4	222.2	210.6	205.9	110.80	79.35	65.81	53.69	29.64	15.19
1.75	463.7	380.1	347.5	310.2	286.0	256.3	242.1	227.6	215.5	205.1	201.6	107.74	77.62	64.37	52.53	29.35	15.05
1.80	439.8	360.5	330.4	295.9	274.9	246.1	232.7	219.0	207.9	198.4	195.7	103.89	75.74	62.78	51.23	28.59	14.91

Constant Power Discharge (Watts/cell @ 25°C /77°F)

V/cell	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1hr	2hr	3hr	4hr	5hr	10hr	20hr
1.60	927.5	760.2	701.8	634.4	578.8	530.0	496.5	462.3	431.0	403.5	387.3	209.55	152.98	130.03	107.09	60.00	31.66
1.65	894.6	733.2	678.3	614.9	563.6	516.0	483.8	451.0	421.0	394.9	380.0	205.18	151.54	128.59	105.64	59.42	31.66
1.70	860.2	705.0	653.1	593.1	545.6	499.6	469.2	438.1	410.0	385.8	372.7	200.09	148.65	126.35	104.05	58.27	31.23
1.75	822.8	674.3	625.8	569.5	526.3	481.8	453.1	423.9	397.6	375.3	363.9	193.55	144.32	123.25	102.18	57.83	30.66
1.80	782.4	641.2	596.3	544.2	505.5	462.7	435.7	408.2	383.7	363.4	353.7	186.49	140.42	120.15	99.87	57.26	30.38

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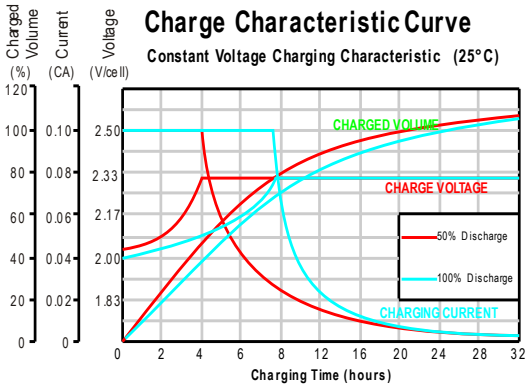
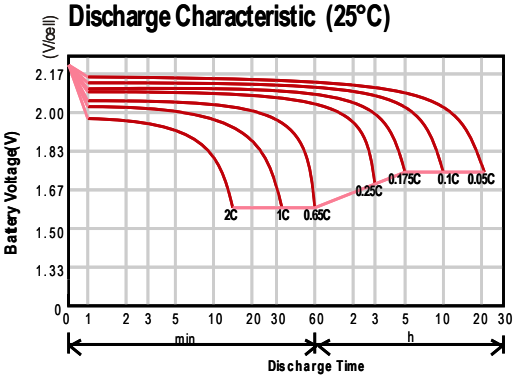
Graphs

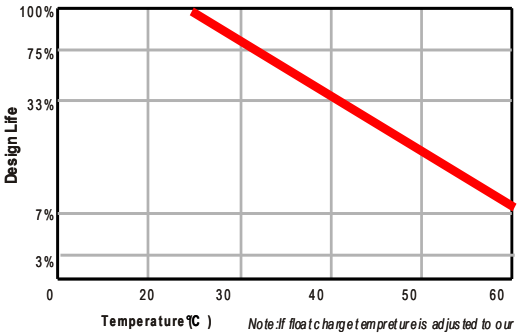
Charge Characteristic Curve



Discharge Characteristic (25°C)

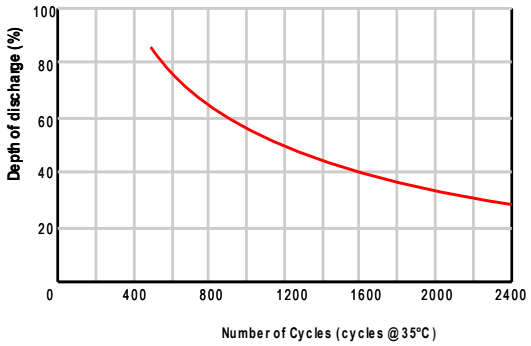


Temperature Effects On Float Life

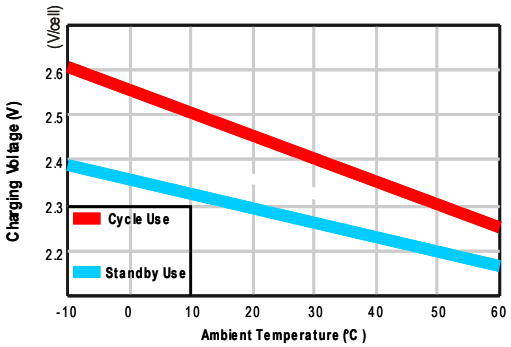


Note:If float charge tempreture is adjusted to our recommendation, then maximum will be achieved.

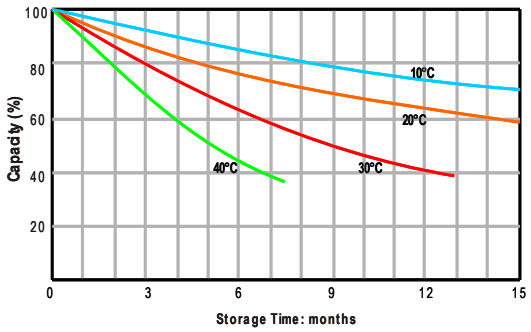
Cycle Service Life V.S. Depth Of Discharge



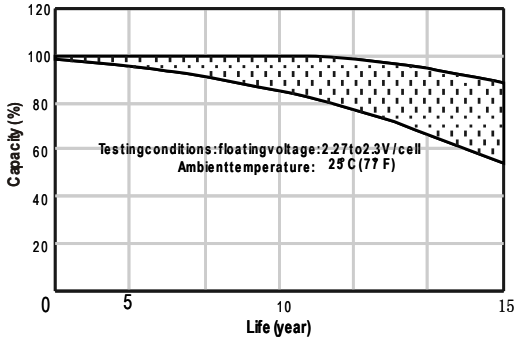
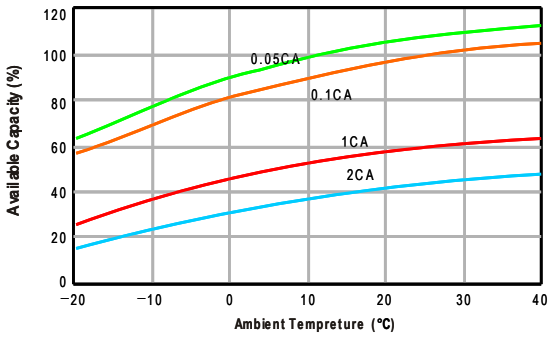
Charging Voltage V.S. Temperature



Self-Discharge Characteristic



Life Characteristics Of Standby Use



Temperature Effects On Capacity