

OPzV500

2V500Ah / 10hr rate**BATTERY**
Genergy

Introduction

Genergy OPzV series is designed for alternative energy system including solar energy system with 20-year design life in float service. Immobilized Gel and tubular plate technology is applied to provide high performance and long life. The series is suitable for cyclic use under extreme operating conditions.

Battery Features

- Genuine Gel
- Long service life. Under float charging, ambient temperature 25° C, it can operate 15-20 years.
- Multi-position usage
- Enhanced deep cycle performance.
- Excellent recovery from deep discharge and good deep discharge cycle capability.
- Very low self-discharge.
- Excellent temperature resistance performance.
- Superior low current discharge performance.
- Strong constant power discharge capability.
- Very good charge reception capability.

Electrical Specification

Design floating Life @ 25°C (77°F)	20 years
Nominal Capacity @ 25°C /77°F	
120 hr rate 5.5A to 1.85Vpc	660 Ah
10 hr rate 50.3A to 1.80Vpc	503 Ah
Internal Resistance	
(Fully charged battery @ 25°C /77°F)	0.5 mΩ
Max. Discharge Current @ 25°C /77°F	2500 A (5S)
Charge Methods: Constant voltage charge @ 25°C /77°F	
Cycle Use	2.38 ~ 2.42V
Max. Current	75 A
Standby Use	2.23 ~ 2.27V
Operating Temperature Range	-30 ~ 50°C
<i>Notes: battery voltage must be adjusted according to temperature.</i>	
<i>Please refer to our recommendation.</i>	
Self-Discharge	2% of capacity declined per month @ 25°C (77°F).

Typical Applications

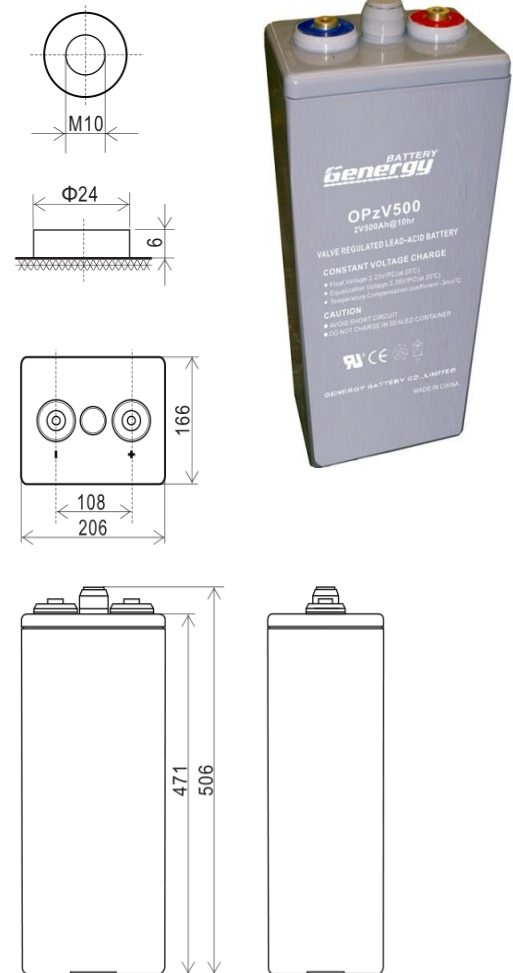
- Solar Energy System
- Wind Energy System
- Power Utility
- UPS/EPS
- BTS system
- Data Center

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

V/cell	15min	30min	1hr	3hr	5hr	10hr	24hr	48hr	120hr
1.65	630	470	295	135	94.2	52.0	25.2	14.1	5.97
1.70	570	427	277	130	89.2	51.6	24.9	13.8	5.92
1.75	537	405	260	128	87.5	51.0	24.7	13.7	5.88
1.80	505	382	255	125	84.2	50.0	24.4	13.6	5.86
1.85	472	347	244	122	81.8	47.2	23.2	13.0	5.50

Battery Picture & Terminal Layout

Terminal Type: T28



Dimension & Weight

Length	Dimension (± 2mm)			Weight (± 2%)
	Width	Height	Total Height	
206 mm	166 mm	471 mm	506 mm	38.5 kg
8.1 inch	6.5 inch	18.5 inch	19.9 inch	84.9 lbs

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

V/cell	15min	30min	1hr	3hr	5hr	10hr	24hr	48hr	120hr
1.65	1228	995	586	267	188	103	50.4	28.1	11.9
1.70	1112	915	552	259	178	102	50.1	28.0	11.8
1.75	1048	790	517	255	173	101	49.7	27.7	11.6
1.80	985	745	507	249	166	99.2	48.7	27.0	11.5
1.85	922	677	487	243	162	94.2	46.2	25.8	10.9

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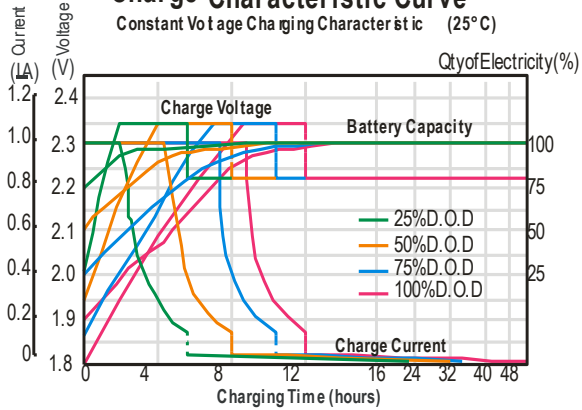
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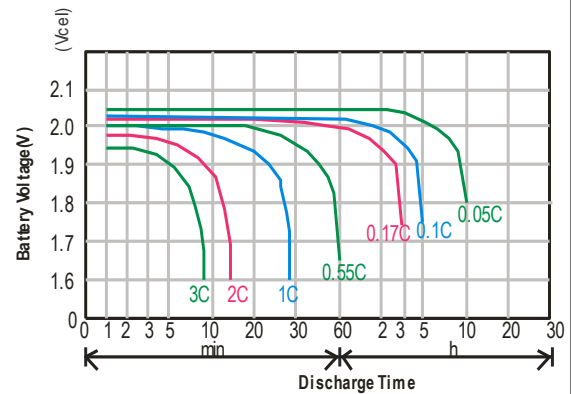
Graphs

Charge Characteristic Curve

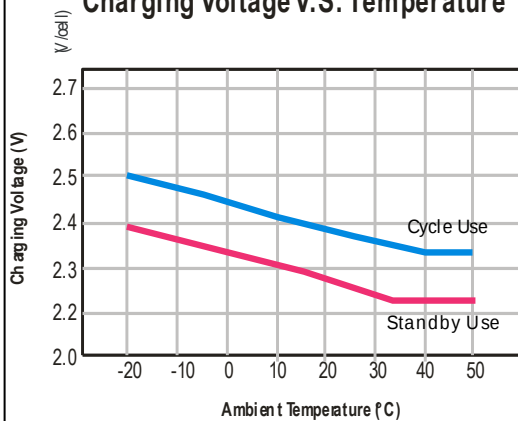
Constant Voltage Charging Characteristic (25°C)



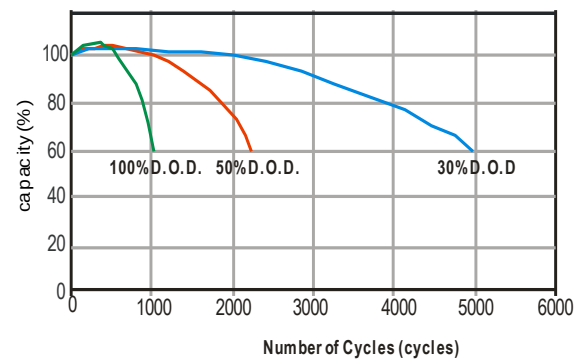
Discharge Characteristic (25°C)



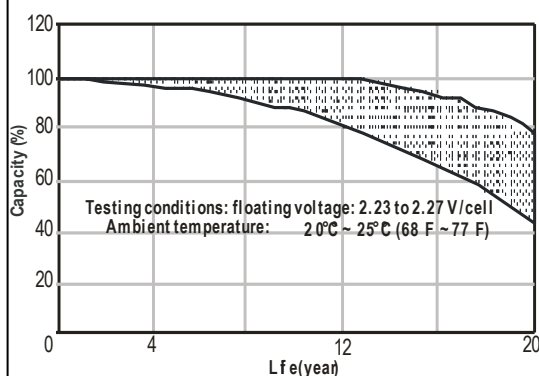
Charging Voltage V.S. Temperature



Cycle Service Life V.S. Depth Of Discharge



Life Characteristics Of Standby Use



Self-Discharge Characteristic

