



GEL BATTERY OPzV Series

OPzV2500 (2V 2500Ah)



The battery is manufactured with PVC-SiO₂ separator and colloidal or fumed silica. The tubular positive plate and pasted negative plate is applied. The batteries use silica gel to immobilize the electrolyte inside the battery. The proven silica gel technology improves battery cycle life and performance at various ambient temperatures.

Battery Construction

COMPONENT	POSITIVE PLATE	NEGATIVE PLATE	CONTAINER	COVER	SAFETY VALVE	TERMINAL	SEPARATOR	ELECTROLYTE
Raw material	Tubular	Lead	ABS	ABS	Rubber	Copper	PVC-SiO ₂	Fumed Silicon

Performance Characteristics

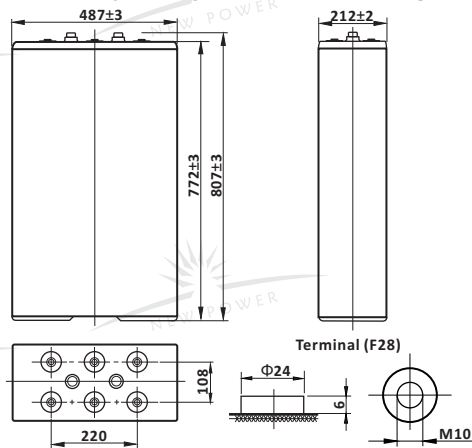
- **Nominal Voltage** 2V
- **Number of Cell** 1
- **Nominal Capacity (77°F / 25°C)**
 - 100 Hour rate (30.0A, 1.85V) 3000Ah
 - 10 Hour rate (250A, 1.8V) 625Ah
 - 3 Hour rate (625A, 1.7V) 1875Ah
 - 1 Hour rate (1431A, 1.6V) 1431Ah
- **Internal Resistance**
 - Fully charged battery (77°F / 25°C) 0.15mΩ
- **Operating Temperature Range**
 - Discharge -20 ~ 65°C
 - Charge -10 ~ 65°C
 - Store -20 ~ 65°C
- **Self-Discharge 68°F (20°C)**
 - Capacity declined per month 1.5%
- **Max. discharge current 77°F / 25°C** 12500A(5S)
- **Charge Methods: constant voltage charge 77°F / 25°C**
 - Cycle use 2.38 ~ 2.42V
 - Max. Current 375A
 - Standby use 2.23 ~ 2.27V

General Features

- **The battery has a long service life, under float charging, ambient temperature 25°C, it can operate 15-20 years.**
- **High cycle service life.**
- **Excellent recovery from deep discharge and good deep discharge cycle capability.**
- **The battery has a low self-discharge, keep over 60% of the rated capacity after 2 years stored under 20°C.**
- **Better temperature resistance performance.**
- **Excellent deep cycle performance.**
- **Superior low current discharge performance.**
- **Better high temperature performance.**
- **Stronger constant power discharge capability.**
- **Better charge reception capability.**
- **Better safety performance and reliability.**
- **Modular and personified installation design.**

Dimensions and Weight

Type	Length	Width	Height	Total Height	Approx. Weight
SI Units	487mm	212mm	772mm	807mm	185Kg
English Units	19.2inch	8.34inch	30.4inch	31.8inch	407.86lbs



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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	3150	2350	1400	671	474	260	64.5	32.23	29.86
1.70	2850	2140	1390	650	449	258	64.0	31.91	29.63
1.75	2690	2030	1300	643	425	255	63.5	31.72	29.43
1.80	2530	1910	1280	625	415	250	63.1	31.04	29.03
1.85	2360	1740	1220	612	408	236	60.3	30.00	27.63

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

V/cell	15min	30min	1h	3h	5h	10h	48h	100h	120h
1.65	6140	4590	2816	1340	944	516	134	90.0	56.3
1.70	5560	4170	2760	1290	893	514	131	89.4	56.1
1.75	5240	3950	2590	1280	871	506	129	88.9	55.8
1.80	4920	3730	2540	1240	836	499	125	87.2	54.7
1.85	4610	3390	2440	1210	814	470	119	83.0	52.0

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



