



GEL BATTERY OPzV Series



OPzV3000 (2V 3000Ah)

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

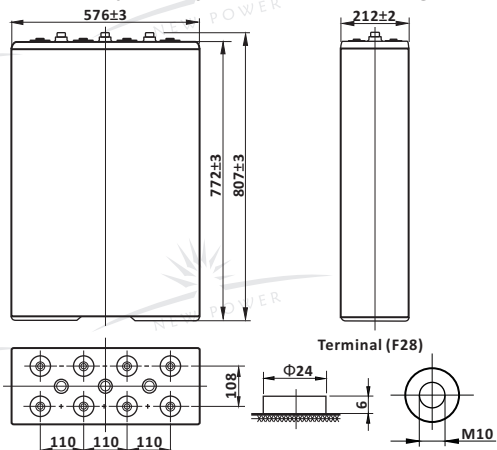
- **Nominal Voltage** 2V
- **Number of Cell** 1
- **Nominal Capacity (77°F / 25°C)**
 - 100 Hour rate (36.0A, 1.85V) 3600Ah
 - 10 Hour rate (300A, 1.8V) 3000Ah
 - 3 Hour rate (750A, 1.7V) 2250Ah
 - 1 Hour rate (1710A, 1.6V) 1710Ah
- **Internal Resistance**
 - Fully charged battery (77°F / 25°C) 0.10mΩ
- **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** 15000A(5S)
- **Charge Methods: constant voltage charge 77°F / 25°C**
 - Cycle use 2.38 ~ 2.42V
 - Max. Current 450A
 - 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	576mm	212mm	772mm	807mm	222Kg
English Units	22.7inch	8.34inch	30.4inch	31.7inch	489.4lbs



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

V/cell	15min	30min	1h	3h	5h	10h	48h	100h	120h
1.65	3780	2820	1680	806	568	312	76.8	38.60	35.84
1.70	3420	2568	1668	782	538	309	76.51	38.33	35.31
1.75	3228	2436	1560	772	524	306	76.0	37.98	34.83
1.80	3036	2292	1536	750	502	300	75.5	37.60	33.15
1.85	2832	2088	1464	734	490	284	72.0	36.00	31.60

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

V/cell	15min	30min	1h	3h	5h	10h	48h	100h	120h
1.65	7368	5508	3380	1608	1132	620	159	108	67.6
1.70	6672	5004	3312	1548	1072	616	157	107	67.3
1.75	6288	4740	3180	1536	1046	608	154	106	66.9
1.80	5904	4476	3048	1488	1004	598	150	104	65.6
1.85	5532	4068	2928	1452	976	564	143	100	62.4

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



