



GEL BATTERY OPzV Series



OPzV2000 (2V 2000Ah)

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

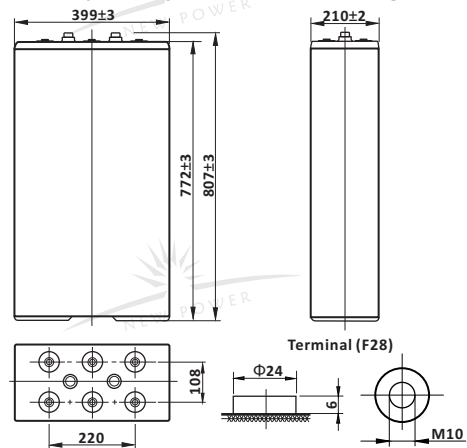
- **Nominal Voltage** 2V
- **Number of Cell** 1
- **Nominal Capacity (77°F / 25°C)**
 - 100 Hour rate (24.0A, 1.85V) 2400Ah
 - 10 Hour rate (200A, 1.8V) 2000Ah
 - 3 Hour rate (500A, 1.8V) 1500Ah
 - 1 Hour rate (1140A, 1.6V) 1140Ah
- **Internal Resistance**
 - Fully charged battery (77°F / 25°C) 0.15mΩ
- **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** 10000A(5S)
- **Charge Methods: constant voltage charge 77°F / 25°C**
 - Cycle use 2.38 ~ 2.42V
 - Max. Current 300A
 - 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	399mm	210mm	772mm	807mm	152Kg
English Units	15.7inch	8.26inch	30.4inch	31.7inch	335.1lbs



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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	2520	1880	1120	537	379	--	--	--	--
1.70	2280	1712	1112	521	359	--	--	--	--
1.75	2152	1642	1040	515	349	204	--	--	--
1.80	2024	1528	1024	500	335	200	--	--	--
1.85	1888	1392	976	489	327	189	48.0	24.0	21.1

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

V/cell	15min	30min	1h	3h	5h	10h	48h	100h	120h
1.65	4912	3672	2253	1072	755	--	--	--	--
1.70	4448	3336	2208	1032	715	--	--	--	--
1.75	4192	3160	2072	1024	697	405	--	--	--
1.80	3936	2984	2032	992	669	399	--	--	--
1.85	3688	2712	1952	968	651	376	95.2	66.4	41.6

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



