



# GEL BATTERY OPzV Series



## OPzV1000 (2V 1000Ah)

The battery is manufactured with PVC-SiO<sub>2</sub> 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 <sub>2</sub>	Fumed Silicon

### Performance Characteristics

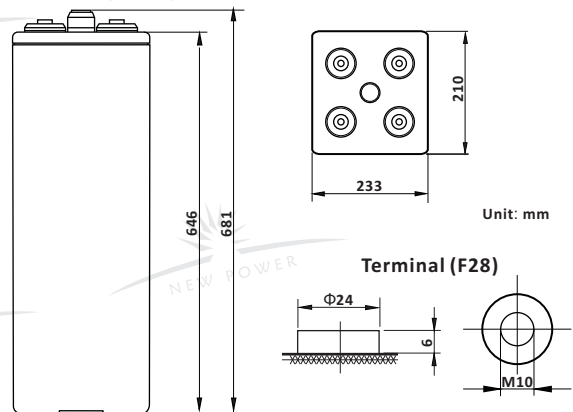
- **Nominal Voltage** ..... 2V
- **Number of Cell** ..... 1
- **Nominal Capacity (77°F/25°C)**
  - 240 Hour rate (5.49A, 1.85V) ..... 1318Ah
  - 48 Hour rate (26A, 1.85V) ..... 1250Ah
  - 10 Hour rate (100A, 1.8V) ..... 1000Ah
  - 3 Hour rate (250A, 1.8V) ..... 750Ah
- **Internal Resistance**
  - Fully charged battery (77°F/25°C) ..... 0.28mΩ
- **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** ..... 5000A(5S)
- **Charge Methods: constant voltage charge 77°F/25°C**
  - Cycle use ..... 2.38 ~ 2.42V
  - Max. Current ..... 150A
  - 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	233mm	210mm	646mm	681mm	73Kg
English Units	9.17inch	8.26inch	25.4inch	26.8inch	160.9bs



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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	1260	940	590	269	189	-	-	-	-
1.70	1140	855	555	261	179	-	-	-	-
1.75	1075	810	520	257	175	102	-	-	-
1.80	1010	756	510	250	168	100	-	-	-
1.85	945	695	489	245	164	94.5	46.5	26.0	11.0

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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	2455	1830	1180	535	376	-	-	-	-
1.70	2225	1665	1105	520	357	-	-	-	-
1.75	2095	1580	1040	510	347	203	-	-	-
1.80	1970	1490	1015	497	334	199	-	-	-
1.85	1845	1355	975	486	325	189	92.5	51.5	22.2

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



