



# GEL BATTERY OPzV Series



**OPzV200 (2V 200Ah)**

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

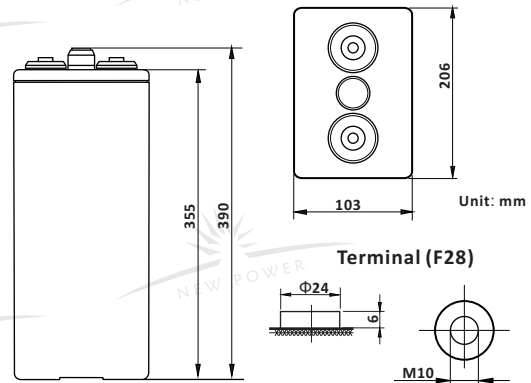
- **Nominal Voltage** ..... 2V
- **Number of Cell** ..... 1
- **Nominal Capacity (77°F / 25°C)**
  - 100 Hour rate (2.40A, 1.85V) ..... 240Ah
  - 10 Hour rate (20A, 1.80V) ..... 200Ah
  - 3 Hour rate (50A, 1.80V) ..... 150Ah
  - 1Hour rate (114.0A, 1.60V) ..... 114Ah
- **Internal Resistance**
  - Fully charged battery (77°F / 25°C) ..... 0.95mΩ
- **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** ..... 1000A(5S)
- **Charge Methods: constant voltage charge 77°F / 25°C**
  - Cycle use ..... 2.38 ~ 2.42V
  - Max. Current ..... 30A
  - 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	206mm	103mm	355mm	390mm	18.0Kg
English Units	8.11inch	4.05inch	14inch	15.44inch	39.68lbs



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

V/cell	15min	30min	1h	3h	5h	10h	48h	100h	120h
1.65	252	188	112	53.5	37.9	-	-	-	-
1.70	228	171	110	52.1	35.9	-	-	-	-
1.75	215	162	104	51.5	35.0	20.4	-	-	-
1.80	202	153	102	50.0	33.5	20.0	-	-	-
1.85	188	139	97.6	48.9	32.7	18.9	4.80	2.40	2.11

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

V/cell	15min	30min	1h	3h	5h	10h	48h	100h	120h
1.65	491	367	225	107	75.5	-	-	-	-
1.70	445	333	220	103	71.5	-	-	-	-
1.75	419	316	207	102	69.7	40.5	-	-	-
1.80	393	298	203	99.2	66.9	39.9	-	-	-
1.85	368	271	195	96.8	65.1	37.6	9.52	6.64	4.16

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



