



# GEL BATTERY OPzV Series

## OPzV350 (2V 350Ah)



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

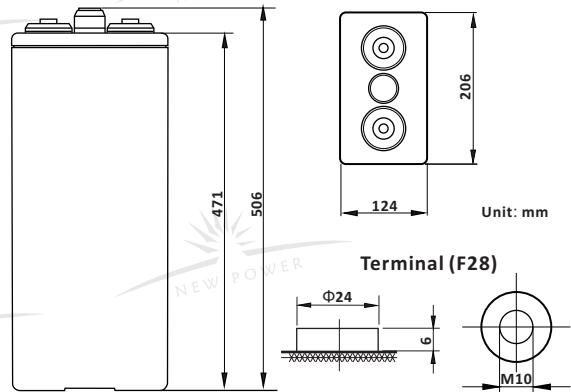
- **Nominal Voltage** ..... 2V
- **Number of Cell** ..... 1
- **Nominal Capacity (77°F /25°C)**
  - 240 Hour rate (1.94A, 1.85V)..... 465Ah
  - 48 Hour rate (9.1A, 1.85V)..... 437Ah
  - 10 Hour rate (35A, 1.8V) ..... 350Ah
  - 3 Hour rate (87.5A, 1.6V)..... 262.5Ah
- **Internal Resistance**
  - Fully charged battery (77°F /25°C) ..... 0.45mΩ
- **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** ..... 1800A(5S)
- **Charge Methods: constant voltage charge 77°F /25°C**
  - Cycle use ..... 2.38 ~ 2.42V
  - Max. Current ..... 52.5A
  - 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	124mm	471mm	506mm	28.5Kg
English Units	8.11inch	4.88inch	18.5inch	19.9inch	62.83lbs



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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	441	329	207	94.0	66.2	36.4	17.6	9.83	4.18
1.70	399	299	194	91.2	62.7	36.1	17.4	9.72	4.15
1.75	376	284	182	90.0	61.1	35.7	17.3	9.61	4.12
1.80	354	268	179	87.5	58.6	35.0	17.1	9.54	4.10
1.85	331	243	171	85.6	57.2	33.1	16.3	9.10	3.90

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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	860	642	411	187	132	72.3	35.3	19.7	8.36
1.70	778	584	387	181	125	71.9	35.1	19.6	8.30
1.75	734	553	362	179	122	71.3	34.8	19.4	8.26
1.80	689	522	355	174	117	69.7	34.1	19.0	8.10
1.85	645	474	341	170	114	65.8	32.4	18.1	7.70

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



