



GEL BATTERY OPzV Series



OPzV600 (2V 600Ah)

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

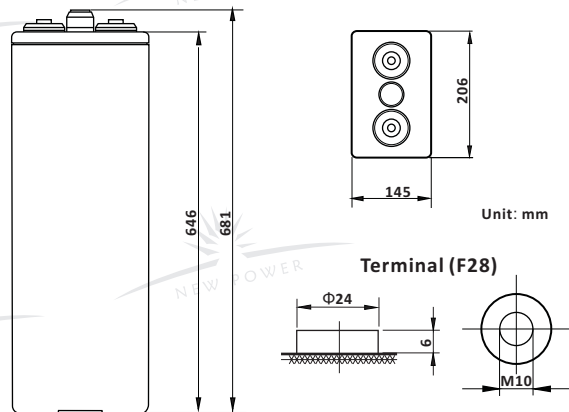
- **Nominal Voltage** 2V
- **Number of Cell** 1
- **Nominal Capacity (77°F /25°C)**
 - 240 Hour rate (3.3A, 1.85V) 799Ah
 - 48 Hour rate (15.6A, 1.85V) 750Ah
 - 10 Hour rate (60A, 1.8V) 600Ah
 - 3 Hour rate (156A, 1.6V) 468Ah
- **Internal Resistance**
 - Fully charged battery (77°F /25°C) 0.35mΩ
- **Operating 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** 2500A(5S)
- **Charge Methods: constant voltage charge 77°F /25°C**
 - Cycle use 2.38 ~ 2.42V
 - Max. Current 90A
 - 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	145mm	646mm	681mm	45Kg
English Units	8.11inch	5.71inch	25.4inch	26.8inch	99.21lbs



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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	756	564	354	161	113	62.4	30.2	16.9	7.17
1.70	684	513	333	156	107	61.9	29.8	16.7	7.11
1.75	645	486	312	154	105	61.2	29.6	16.5	7.06
1.80	606	459	306	150	101	60.0	29.3	16.3	7.02
1.85	567	417	293	147	98.1	56.7	27.9	15.6	6.60

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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	1474	1100	704	321	226	124	60.5	33.8	14.33
1.70	1334	1100	663	311	214	123	60.1	33.6	14.23
1.75	1258	948	621	307	208	122	59.6	33.2	14.16
1.80	1182	895	609	299	200	119	58.4	32.5	13.88
1.85	1106	813	584	292	195	113	55.5	31.0	13.1

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



