



GEL BATTERY OPzV Series

OPzV1500 (2V 1500Ah)



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

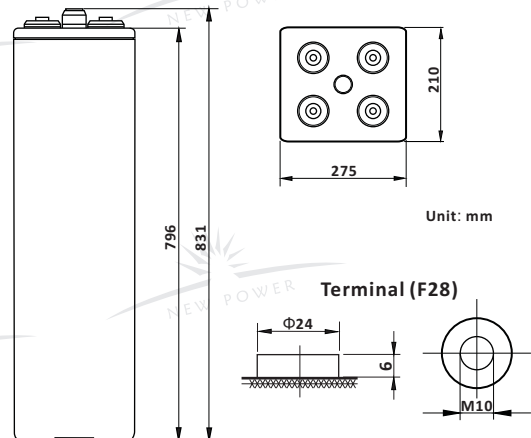
- **Nominal Voltage** 2V
- **Number of Cell** 1
- **Nominal Capacity (77°F / 25°C)**
 - 240 Hour rate (8.08A, 1.85V) 1939Ah
 - 48 Hour rate (39A, 1.85V) 1827Ah
 - 10 Hour rate (150A, 1.8V) 1500Ah
 - 3 Hour rate (375A, 1.8V) 1125Ah
- **Internal Resistance**
 - Fully charged battery (77°F / 25°C) 0.25mΩ
- **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** 8000A(5S)
- **Charge Methods: constant voltage charge 77°F / 25°C**
 - Cycle use 2.38 ~ 2.42V
 - Max. Current 2.25A
 - Standby use 2.23 ~ 2.27V

Dimensions and Weight

Type	Length	Width	Height	Total Height	Approx. Weight
SI Units	275mm	210mm	796mm	831mm	110Kg
English Units	10.8inch	8.26inch	31.3inch	32.7inch	242.5lbs

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.**



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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	1890	1410	885	403	284	--	--	--	--
1.70	1710	1283	833	391	269	--	--	--	--
1.75	1613	1215	780	386	262	153	--	--	--
1.80	1515	1148	765	375	251	150	--	--	--
1.85	1418	1043	734	367	245	142	69.8	39.0	16.5

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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	3683	2745	1770	803	563	--	--	--	--
1.70	3338	2498	1658	780	535	--	--	--	--
1.75	3143	2370	1560	765	521	305	--	--	--
1.80	2955	2235	1523	746	500	299	--	--	--
1.85	2768	2033	1463	730	488	283	139	77.3	33.2

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



