



GEL BATTERY OPzV Series



OPzV1200 (2V 1200Ah)

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

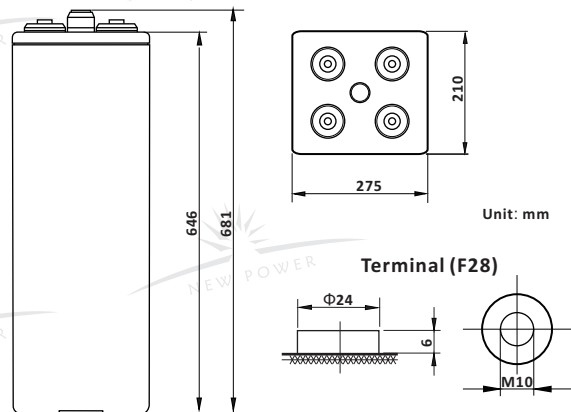
- **Nominal Voltage** 2V
- **Number of Cell** 1
- **Nominal Capacity (77°F /25°C)**
 - 240 Hour rate (6.59A, 1.85V) 1582Ah
 - 48 Hour rate (31.2A, 1.85V) 1500Ah
 - 10 Hour rate (120A, 1.8V) 1200Ah
 - 3 Hour rate (300A, 1.8V) 900Ah
- **Internal Resistance**
 - Fully charged battery (77°F /25°C) 0.26mΩ
- **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** 6000A(5S)
- **Charge Methods: constant voltage charge 77°F /25°C**
 - Cycle use 2.38 ~ 2.42V
 - Max. Current 180A
 - 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	275mm	210mm	646mm	681mm	87.0Kg
English Units	10.8inch	8.26inch	25.4inch	26.8inch	191.8lbs



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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	1512	1128	708	322	227	--	--	--	--
1.70	1368	1026	666	313	215	--	--	--	--
1.75	1290	972	624	308	209	122	--	--	--
1.80	1212	918	612	300	201	120	--	--	--
1.85	1134	834	587	293	196	113	55.8	31.2	13.2

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

V/cell	15min	30min	1h	3h	5h	10h	24h	48h	120h
1.65	2946	2196	1416	642	451	--	--	--	--
1.70	2670	1998	1326	624	428	--	--	--	--
1.75	2514	1896	1248	612	416	244	--	--	--
1.80	2364	1788	1218	597	400	239	--	--	--
1.85	2214	1626	1170	584	390	226	111	61.8	26.6

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



