

OPzV Series

GFMJ-2000H 2V2000Ah (NG2-2000)

OPzV series are valve regulated lead-acid cells which use a combination of tubular positive plate woven gauntlets, pasted negative plate design and gel electrolyte using advanced filling techniques in production which assure superior service life and excellent battery reliability. The battery has excellent cyclic performance and charge acceptance ability. It can be used in high-low temperature environment and poor grid condition.



Benefits

- Very long life according to EUROBAT Classification
- 1500+ cycles at 80% DOD
- High rate discharge performance
- High gas recombination efficiency
- Maximum charge efficiency
- GEL state electrolyte prevents leakage and layering
- Low resistance PVC-SiO2 micro-porous separator ensures low self-discharge rate
- Optional racking offers easy installation (vertical or horizontal)

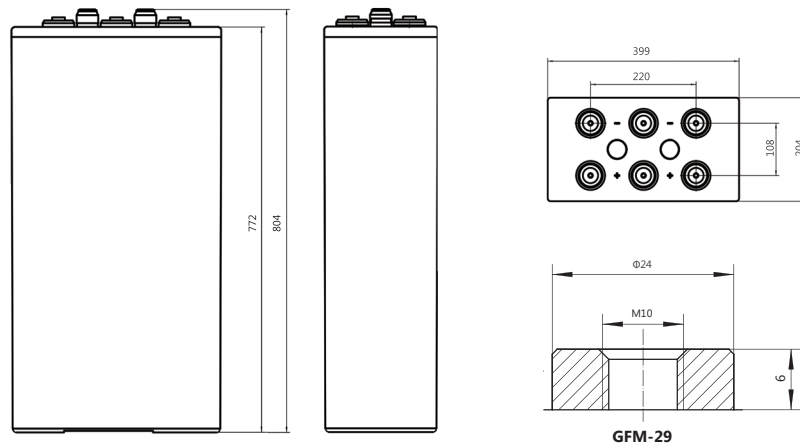
Applications

- Telecommunications
- Energy storage system
- Hybrid power system
- Power system
- UPS

Standards

- IEC 60896-21/22
- IEC 61427
- DIN 43539-T5
- DIN 40742
- EUROBAT guide

Drawing



Specifications

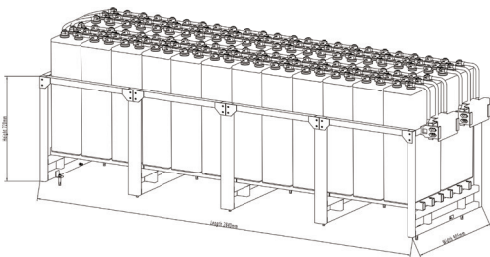
Battery Model	GFMJ-2000H			
Design Life (years, 25°C)	20			
Capacity (Ah, 25°C)	10HR (200A, 1.80V)	5HR (340A, 1.80V)	3HR (500A, 1.80V)	1HR (1000A, 1.80V)
	2000	1700	1500	1000
Dimensions (mm)	Length	Width	Height	Total Height
	399	212	772	804
Approx. Weight (kg)	154			
Reference Internal Resistance (mΩ)	0.22 (fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	7659			
Self-Discharge (25°C)	≤ 3% per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.33 (-3.5mV/°C/cell), max charge current: 400A		2.25 (-3.5mV/°C/cell)	
Short Circuit Current (A)	12657			

Discharge Data

Constant Current Discharge Data (25°C, A)																		
End Voltage (V/cell)	min					h												
	5	10	15	20	30	1	2	3	5	6	8	10	20	24	48	100	120	240
1.65	2567	2295	2006	1743	1479	1153	753.3	588.7	405.3	343.3	265.3	226.0	118.0	99.73	54.00	26.71	22.59	11.52
1.70	2405	2151	1861	1665	1437	1100	713.3	557.3	383.3	324.0	254.7	218.0	115.3	97.07	53.27	26.44	22.38	11.45
1.75	2295	2057	1819	1584	1360	1053	673.3	528.0	363.3	312.0	244.7	210.0	112.0	94.87	52.60	26.12	22.18	11.38
1.80	2167	1955	1725	1535	1309	1000	636.0	500.0	340.0	290.7	235.3	200.0	108.7	93.13	52.00	25.90	21.92	11.30
1.85	2040	1845	1632	1460	1233	953	602	473.3	326.0	280.7	222.7	189.3	105.7	90.6	51.27	25.35	21.58	11.23

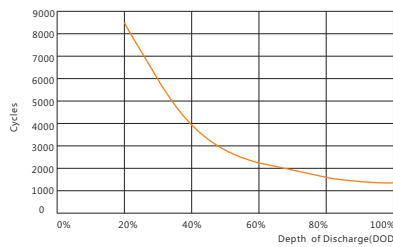
Constant Power Discharge Data (25°C, W/cell)																		
End Voltage (V/cell)	min					h												
	5	10	15	20	30	1	2	3	5	6	8	10	20	24	48	100	120	240
1.65	4060	3700	3328	3049	2620	1975.3	1315.0	985.0	804.8	681.0	547.6	441.4	234.8	199.00	108.00	53.60	45.20	23.08
1.70	3919	3550	3180	2930	2550	1914.0	1265.0	950.0	776.2	657.1	528.6	436.2	230.0	194.50	106.67	52.85	44.75	22.90
1.75	3700	3402	3066	2830	2480	1880.0	1235.0	930.0	757.1	638.1	514.3	420.0	226.7	189.50	105.33	52.17	44.37	22.74
1.80	3325	3220	2960	2745	2426	1830.0	1206.7	915.0	704.8	595.2	495.2	410.0	222.4	185.70	104.00	51.80	43.90	22.59
1.85	3123	2933	2812	2614	2281	1763.1	1155.0	875.0	642.9	566.7	459.5	387.1	215.2	181.30	102.50	50.93	43.20	22.45

Rack Layout

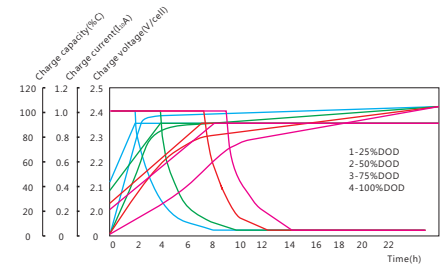


48V Standard Rack
 Rack material: powder-coated steel
 Height*width: 1*2
 Ref. GFMJ-2000H Rack (approx. weight: 3900kg)

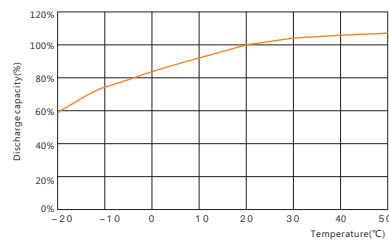
Performance Curve



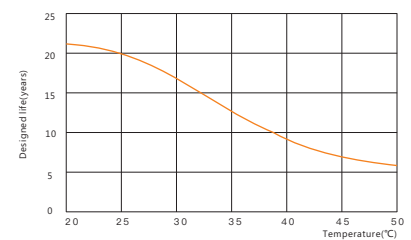
Cycle life vs. discharge depth



Charge vs. discharge depth



Capacity vs. temperature



Design life vs. temperature