

OPzV series adopts an immobilized gel and tubular positive plate technology. It offers high reliability and Stable performance. By using diecasted positive grid and patented active material formula, It exceeds the DIN standard values and offer 20+ years design life in float service. It is very suitable for cyclic use under extreme operating conditions. This series is recommended for telecom out door applications, renewable energy systems and other harsh environment applications.

2V Voltage	3000Ah Capacity	Tubular Gel	20+years Design life
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- Complied standards**
- IEC 60896-21/22
 - DIN40742
 - IEC61427
 - YD/T1360
 - Eurobat guide, long life
 - BS6290 part 4

Features and Benefits

- Excellent deep cycling performance;
- Wide operating temperature range from -40°C to 60°C
- Tubular positive plate with prolonged cycle life
- Fumed Silica gel electrolyte
- Lead Calcium die cast grid with improved corrosion resistance capability
- Low self-discharge rate and long shelf life (1 year at 25°C)
- Excellent deep discharge recovery capability

Construction

- Positive plate - Tubular plate with die cast Pb-Sb alloy grid
- Negative plate - Balanced Pb-Ca grid for improved recombination efficiency
- Electrolyte - Dilute high purity sulphuric acid with fumed Silica gel
- Battery container and cover - ABS
- Pillar seal - 100% factory tested, proven two layers epoxy resin seal
- Relief valve - Complete with integrated flame arrestor

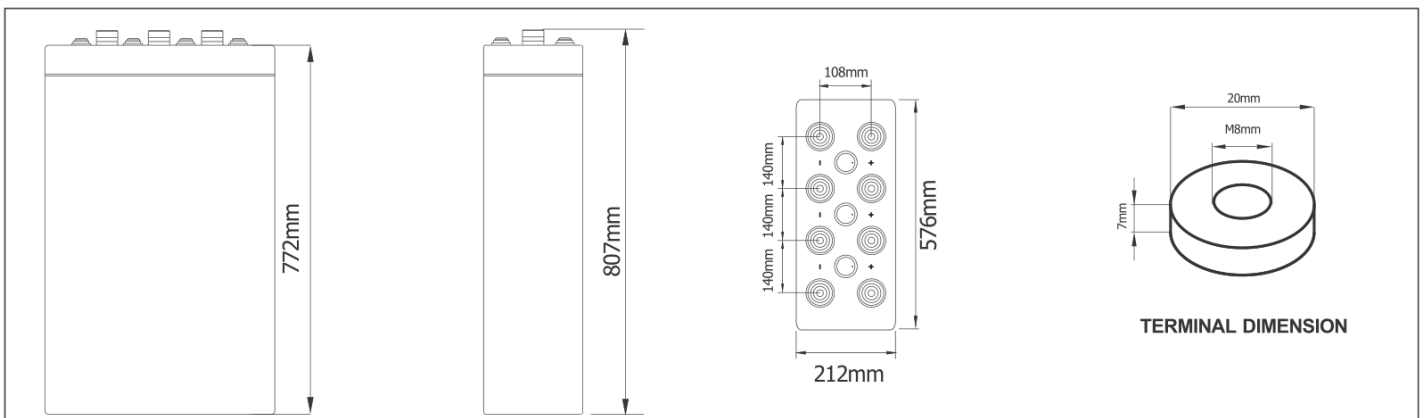
Applications

- Telecom
- Electric Utilities
- Railroad Utilities
- Outdoor applications
- Power Utility
- Control Equipments
- Security Systems
- Medical Equipments
- UPS systems
- Renewable Energy system

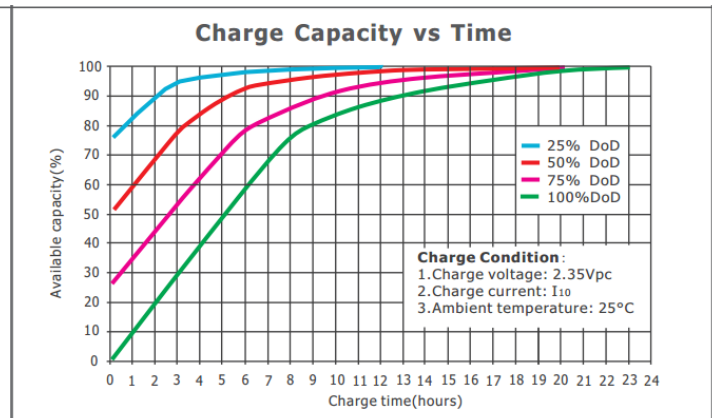
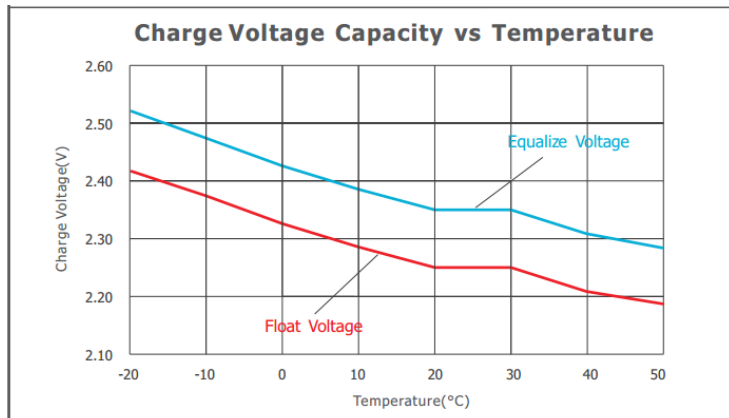
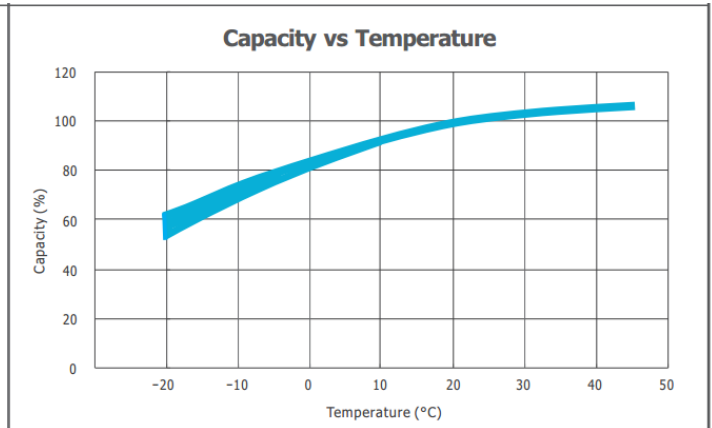
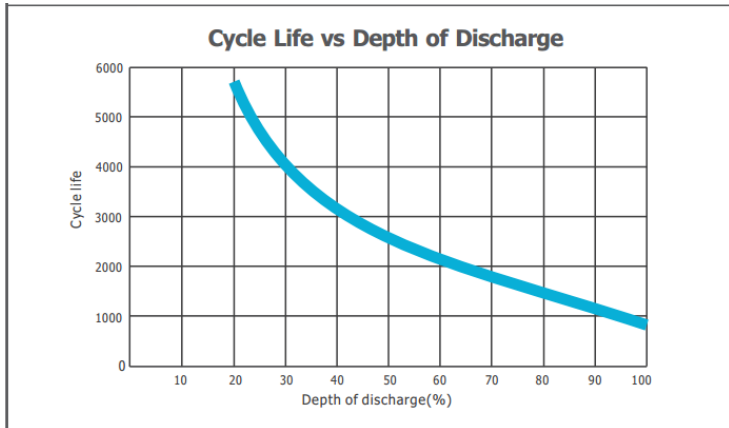
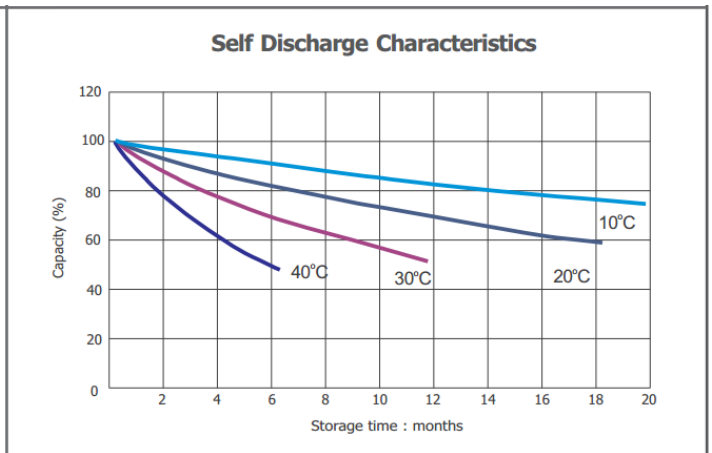
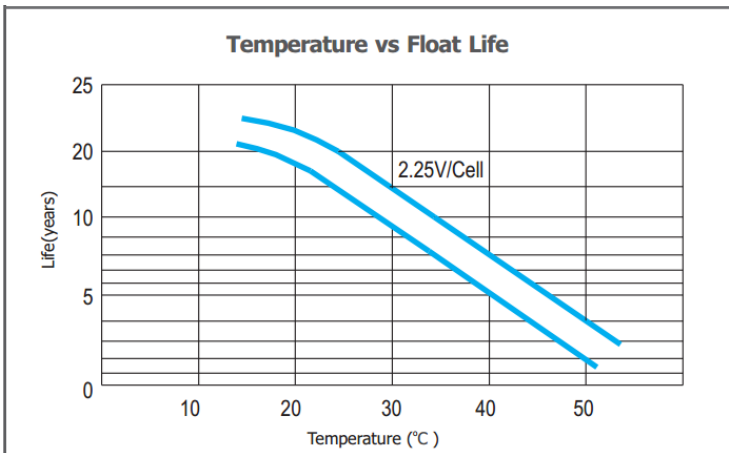
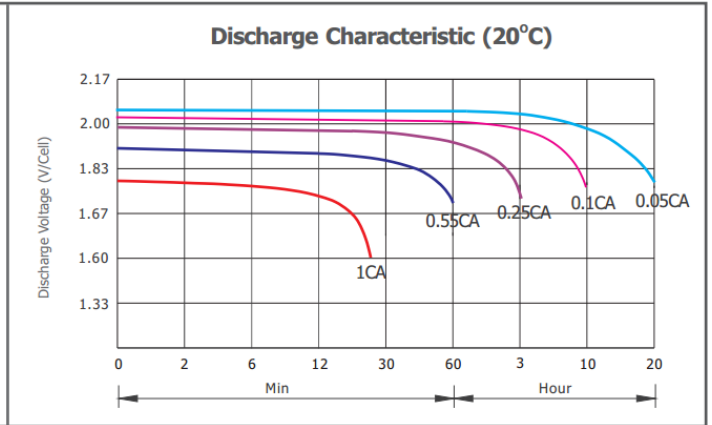
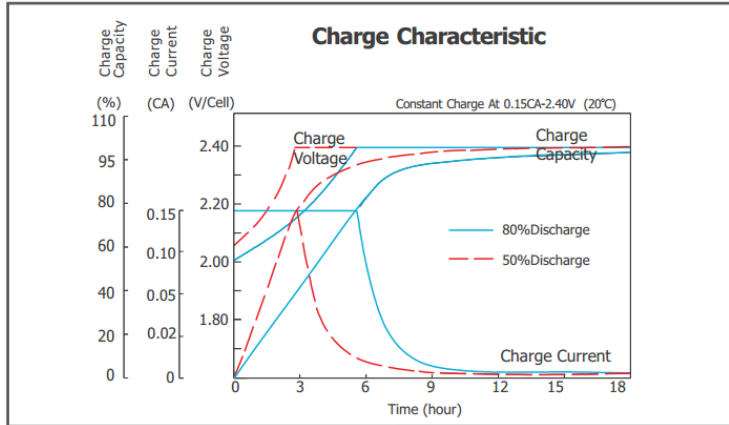
Technical Specifications

Nominal Voltage.....	2V(1 cells per unit)
Nominal Capacity(20°C).....	3000Ah
Dimension(mm).....	L576 x W212 x H772 x TH807mm
Approx. Weight	222kg (489.43lbs)
Terminal Type.....	Female Copper Insert M8(torque:10~12N.m)
Internal Resistance.....	0.16mΩ(fully Charged @20°C)
Max.Charge Current.....	600A
Max.Discharge Current (5s).....	4000A
Short Circuit Current.....	12000A
Ambient Temperature	
Discharge.....	-40-65°C
Charge.....	-30-65°C
Storage.....	-25-45°C
Capacity Affected by Temp.(10 hour)	
105% @40°C	
85% @0°C	
60% @-20°C	
Self-Discharge @20°C.....	Approx. 2% per month
Charge Voltage @20~25°C	
Float charge voltage.....	2.25V-2.29V
Equalize Charge Voltage.....	2.35V-2.40V

Dimensions



Performance Characteristics



Battery Discharge

Discharge Constant Current per Cell (Amperes at 25° C)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.90V	1062	1033	965	815	701	588	435	311	257
1.87V	1447	1351	1197	951	784	648	472	331	272
1.85V	1665	1525	1312	1038	864	697	503	346	283
1.83V	1940	1698	1419	1145	923	736	515	357	288
1.80V	2171	1969	1587	1261	974	772	525	362	300
1.75V	2302	2162	1862	1373	1017	794	535	368	303
1.70V	2504	2374	2046	1450	1056	809	544	373	309
1.65V	2924	2673	2229	1542	1086	823	556	379	315
1.60V	3184	2934	2364	1591	1108	838	567	386	320

Discharge Constant Power per Cell (Watts at 25° C)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.90V	2051	1999	1879	1599	1385	1171	872	627	520
1.87V	2742	2570	2293	1836	1532	1276	938	661	545
1.85V	3110	2860	2481	1981	1669	1358	989	686	562
1.83V	3581	3149	2651	2160	1764	1419	1000	701	567
1.80V	3950	3600	2929	2352	1839	1473	1010	703	573
1.75V	4121	3891	3387	2524	1894	1491	1016	706	583
1.70V	4422	4214	3670	2632	1943	1502	1022	710	590
1.65V	5072	4670	3938	2761	1975	1511	1031	713	595
1.60V	5414	5022	4097	2800	1985	1516	1041	719	600

Final Voltage Settings Recommended According To the Discharge Current

Discharge Current I (A)	$I < 0.05C$	$0.05C \leq I < 0.08C$	$0.08C \leq I < 0.2C$	$0.2C \leq I < 0.6C$	$0.6C \leq I < 1.0C$	$1C \leq I \leq 2C$
Final of Voltage	≥ 1.90 Vpc	≥ 1.85 Vpc	≥ 1.80 Vpc	≥ 1.75 Vpc	≥ 1.7 Vpc	≥ 1.6 Vpc

Long time discharge capacity for solar & wind applications

Capacity	C ₂₀ (Ah)	C ₂₄ (Ah)	C ₄₈ (Ah)	C ₇₂ (Ah)	C ₁₀₀ (Ah)	C ₁₂₀ (Ah)	C ₂₄₀ (Ah)
OPzV2-3000	3215	3279	3620	3710	3780	3800	3860
Final Voltage	1.80V	1.85V					

Solar & wind applications parameters settings

Over voltage disconnect:	2.45±0.01V/cell @ 20~25°C
Regulation/equalize voltage:	2.40±0.01V/cell @ 20~25°C
Array reconnection voltage:	2.25±0.005V/cell @ 20~25°C
Float voltage setting:	2.27±0.005V/cell @ 20~25°C
Low voltage alarm voltage:	1.95±0.005V/cell @ 20~25°C
Low voltage disconnect:	1.90±0.005V/cell @ 20~25°C
Load reconnect voltage:	2.09±0.01V/cell @ 20~25°C
Temp. compensate coefficient:	-5mV/cell/°C