

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	1000Ah 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

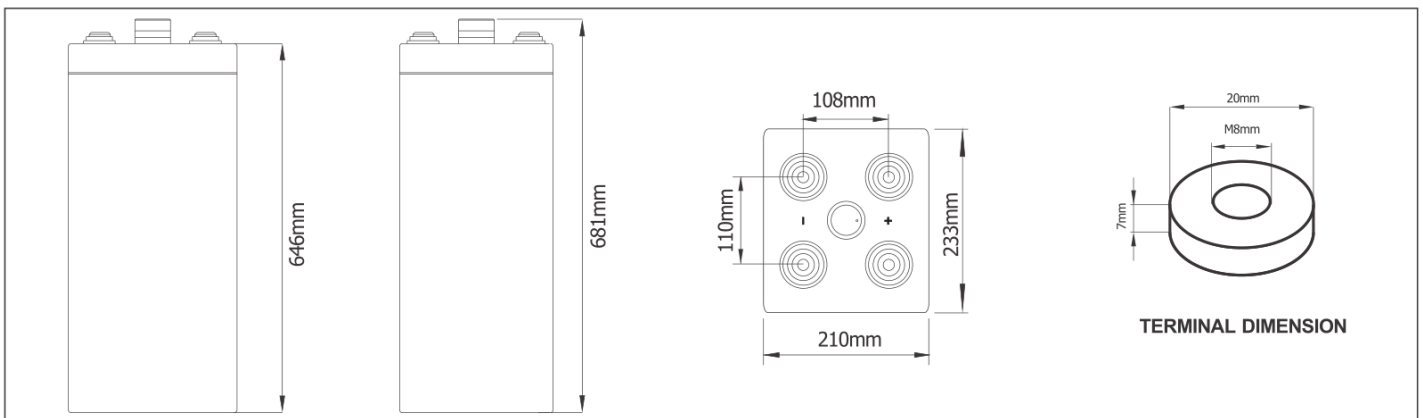
Applications

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

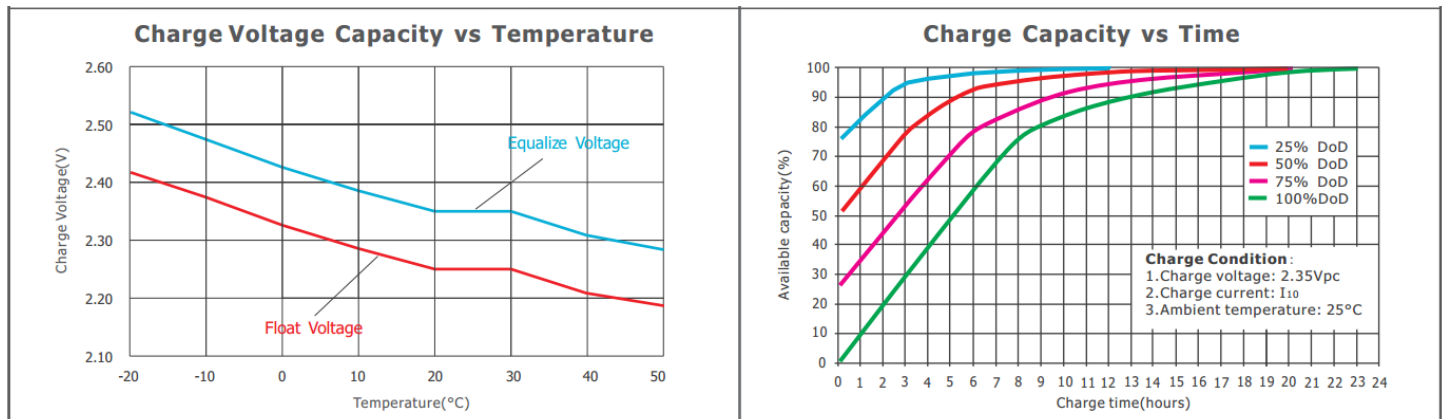
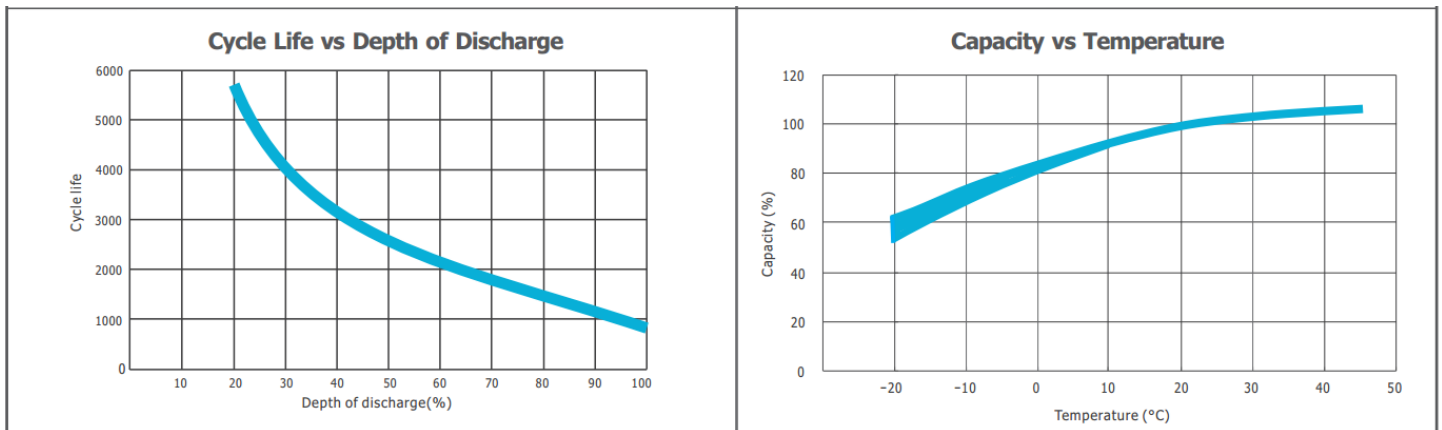
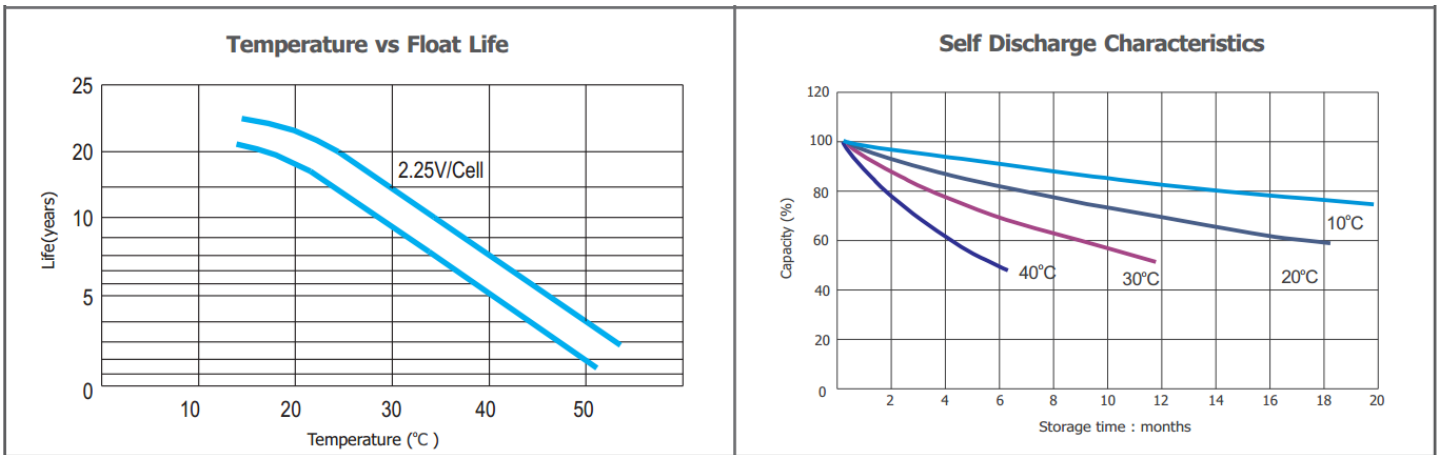
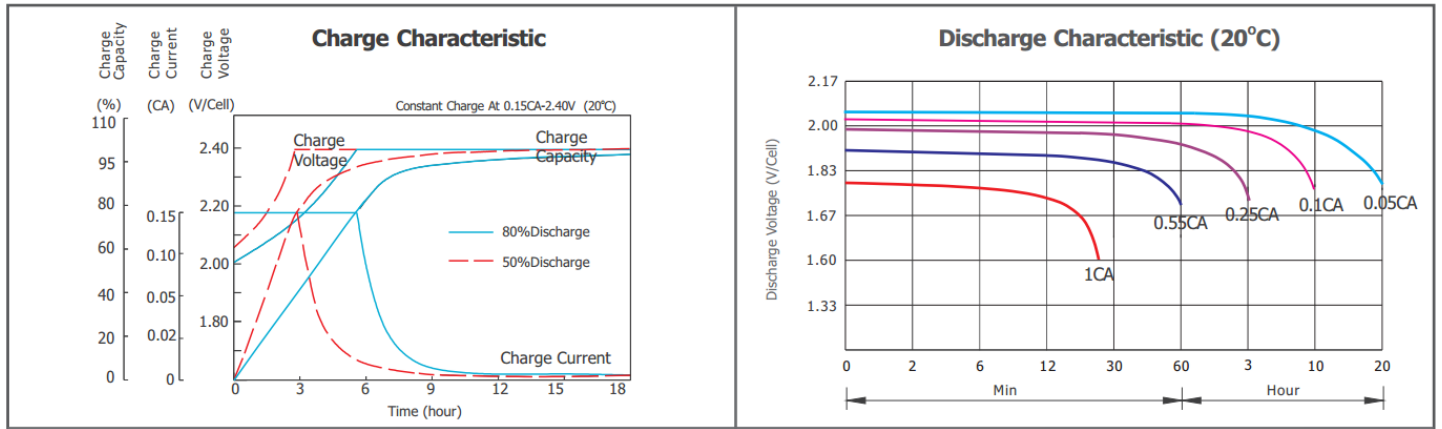
Technical Specifications

Nominal Voltage.....	2V(1 cells per unit)
Nominal Capacity(20°C).....	1000Ah
Dimension(mm).....	L233 x W210 x H646 x TH681mm
Approx. Weight	73.2kg (161.38lbs)
Terminal Type.....	Female Copper Insert M8(torque:10~12N.m)
Internal Resistance.....	0.37mΩ(fully Charged @20°C)
Max.Charge Current.....	200A
Max.Discharge Current (5s).....	2500A
Short Circuit Current.....	5400A
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	10 min	15 min	30 min	1 h	2 h	3 h	5 h	8 h	10 h
1.90V	358	348	325	273	234	196	145	104	87.5
1.87V	487	455	403	319	261	216	157	110	92.5
1.85V	561	514	442	348	288	232	168	115	96.2
1.83V	653	572	478	384	308	245	172	119	98.0
1.80V	731	663	535	423	325	257	175	121	100
1.75V	775	728	627	460	339	265	178	123	101
1.70V	843	800	689	486	352	270	181	124	103
1.65V	985	900	751	517	362	274	185	126	105
1.60V	1072	988	796	533	369	279	189	129	107

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

F.V/Time	10 min	15 min	30 min	1 h	2 h	3 h	5 h	8 h	10 h
1.90V	691	673	633	536	462	390	291	209	177
1.87V	923	865	772	615	511	425	313	220	185
1.85V	1047	963	835	664	556	453	330	229	191
1.83V	1206	1061	893	724	588	473	333	232	193
1.80V	1330	1212	986	788	613	491	337	234	194
1.75V	1388	1310	1141	846	631	497	339	235	195
1.70V	1489	1419	1236	882	648	501	341	237	197
1.65V	1708	1573	1326	925	658	504	344	238	198
1.60V	1823	1691	1380	938	662	505	347	240	200

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)
OPzV2-1000	1080	1120	1220	1260	1275	1290	1316
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