

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.

<b>2V</b> Voltage	<b>800Ah</b> Capacity	<b>Tubular</b> Gel	<b>20+years</b> 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

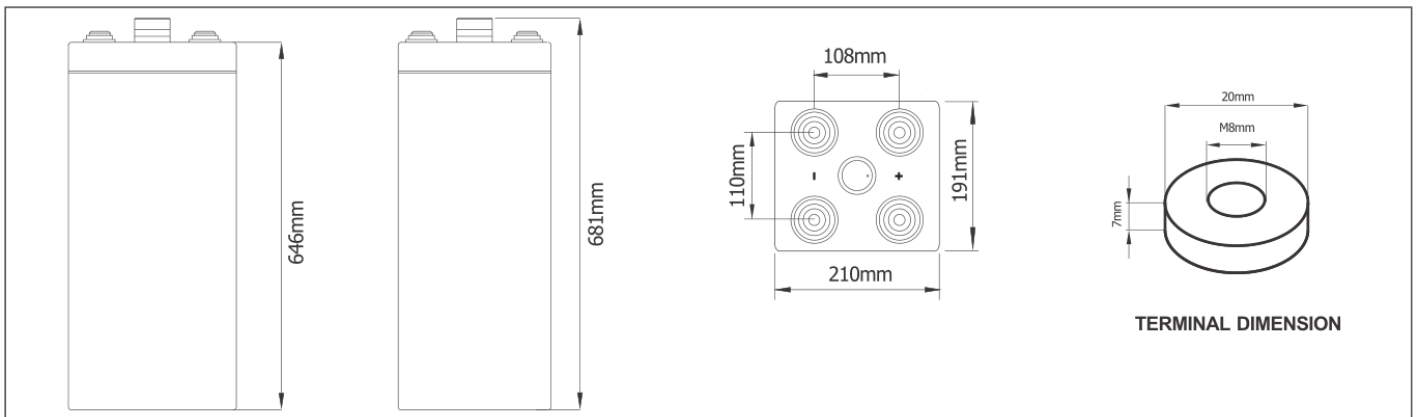
## Applications

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

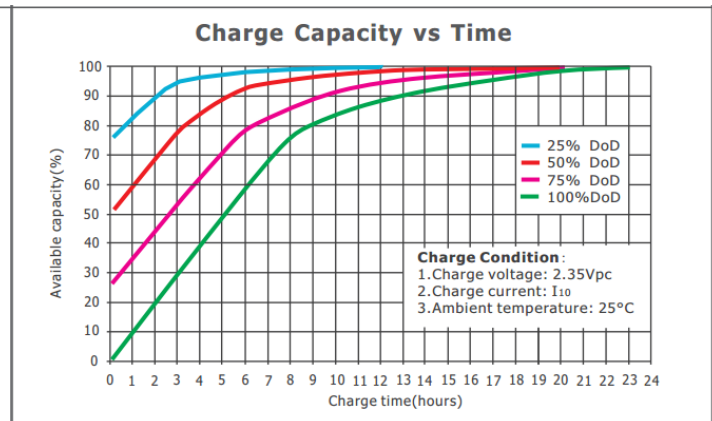
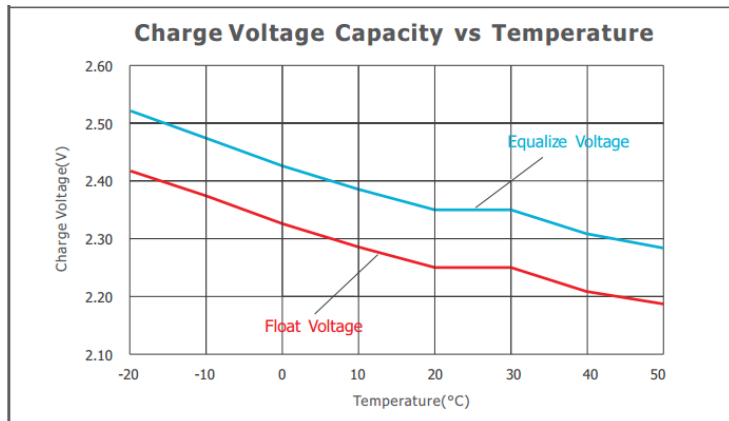
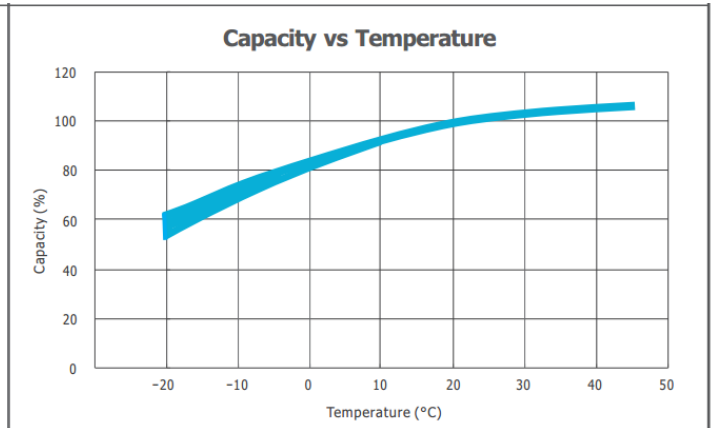
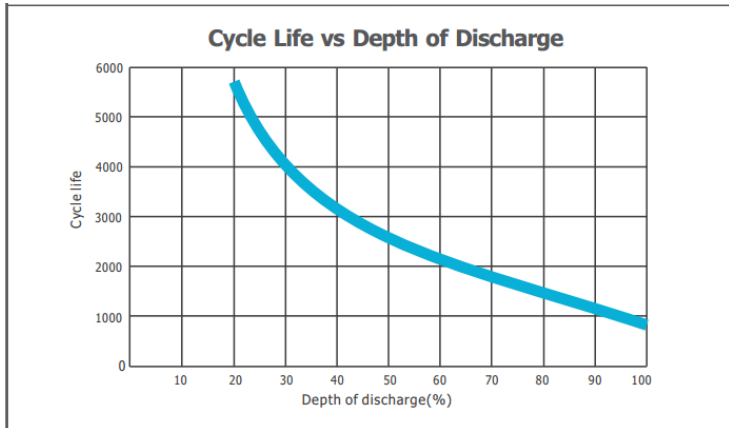
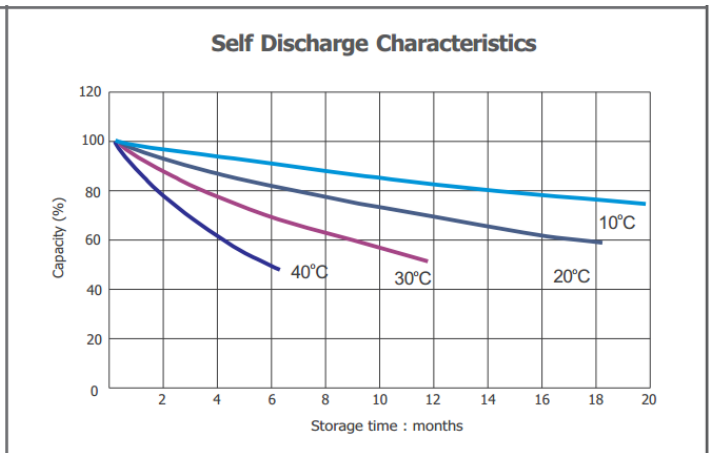
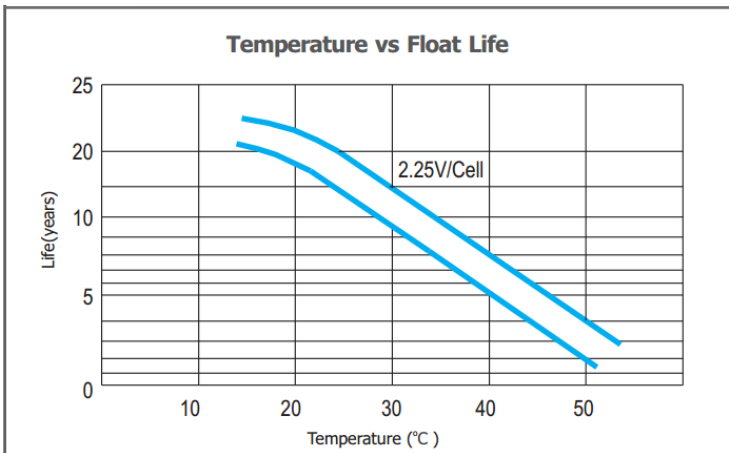
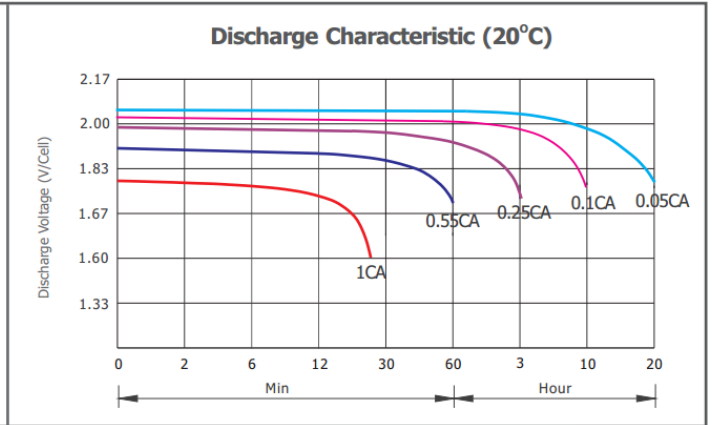
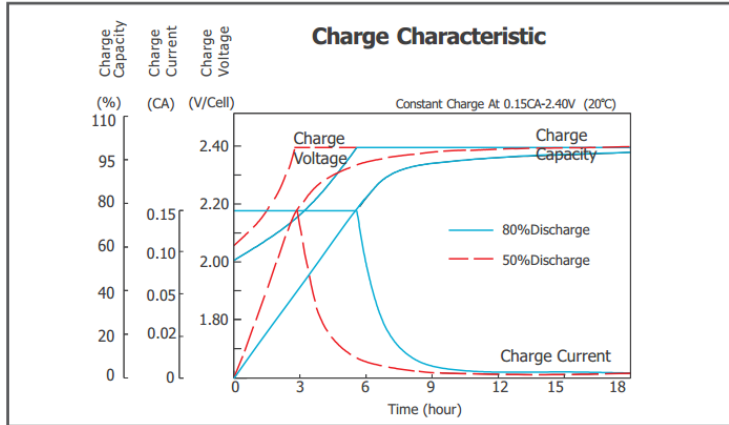
## Technical Specifications

Nominal Voltage.....	2V(1 cells per unit)
Nominal Capacity(20°C).....	800Ah
Dimension(mm).....	L191 x W210 x H646 x TH681mm
Approx. Weight .....	60.0kg (132.28lbs)
Terminal Type.....	Female Copper Insert M8(torque:10~12N.m)
Internal Resistance.....	0.46mΩ(fully Charged @20°C)
Max.Charge Current.....	160A
Max.Discharge Current (5s).....	2000A
Short Circuit Current.....	4300A
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	10m in	15m in	30m in	1h	2h	3h	5h	8h	10h
1.90V	289	281	263	221	188	158	117	83.5	69.7
1.87V	394	368	326	257	210	174	127	88.7	73.6
1.85V	453	415	357	281	232	187	135	92.8	76.5
1.83V	528	462	386	310	247	197	138	95.7	78.0
1.80V	591	536	432	341	261	207	141	96.9	80.0
1.75V	626	588	507	372	273	213	143	98.5	81.2
1.70V	682	646	557	393	283	217	146	100	82.7
1.65V	796	728	607	418	291	221	149	102	84.3
1.60V	867	799	644	431	297	225	152	104	85.9

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

F.V/Time	10m in	15m in	30m in	1h	2h	3h	5h	8h	10h
1.90V	558	544	511	433	371	314	234	168	141
1.87V	746	699	624	497	411	342	251	177	148
1.85V	846	779	675	537	447	364	265	184	152
1.83V	975	857	721	585	473	380	268	186	154
1.80V	1075	980	797	637	493	395	271	188	155
1.75V	1122	1059	922	684	508	400	272	189	156
1.70V	1204	1147	999	713	521	403	274	190	158
1.65V	1381	1271	1072	748	529	405	276	191	159
1.60V	1474	1367	1115	758	532	406	279	193	161

Long time discharge capacity for solar & wind applications

Capacity	C <sub>20</sub> (Ah)	C <sub>24</sub> (Ah)	C <sub>48</sub> (Ah)	C <sub>72</sub> (Ah)	C <sub>100</sub> (Ah)	C <sub>120</sub> (Ah)	C <sub>240</sub> (Ah)
OPzV2-800	870	900	976	1008	1020	1032	1055
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

Final Voltage Settings Recommended According To the Discharge Current

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