

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	700Ah Capacity	Tubular Gel	20+years Design life
----------------------	--------------------------	-----------------------	--------------------------------



- 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

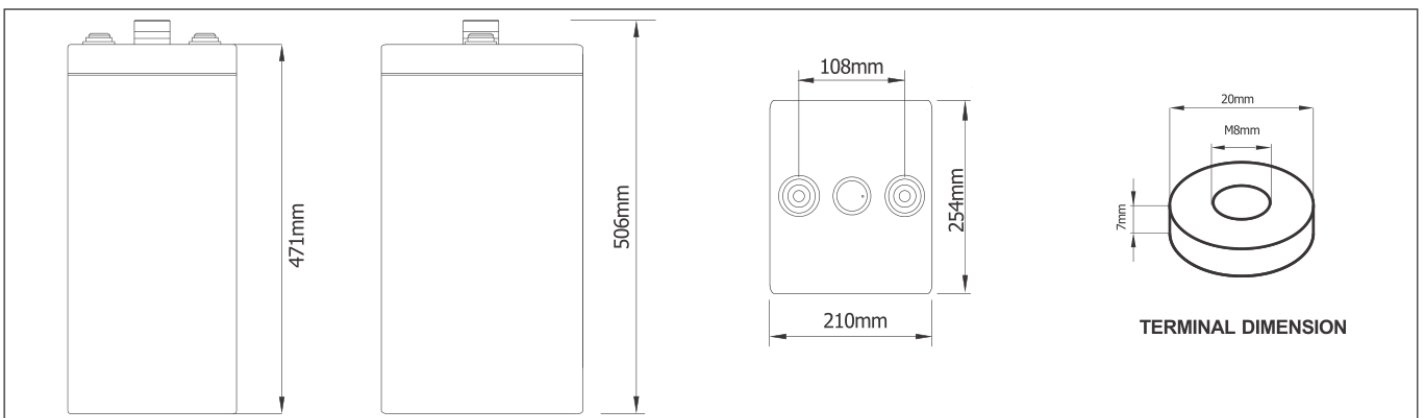
Applications

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

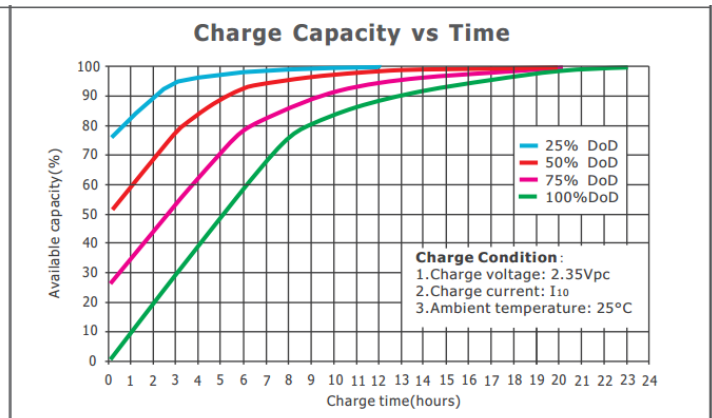
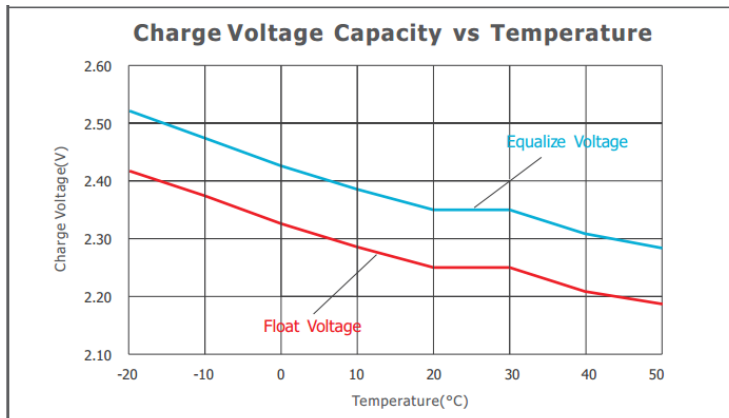
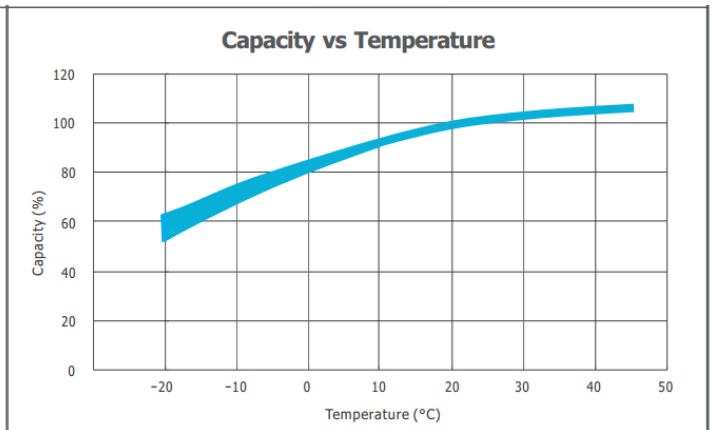
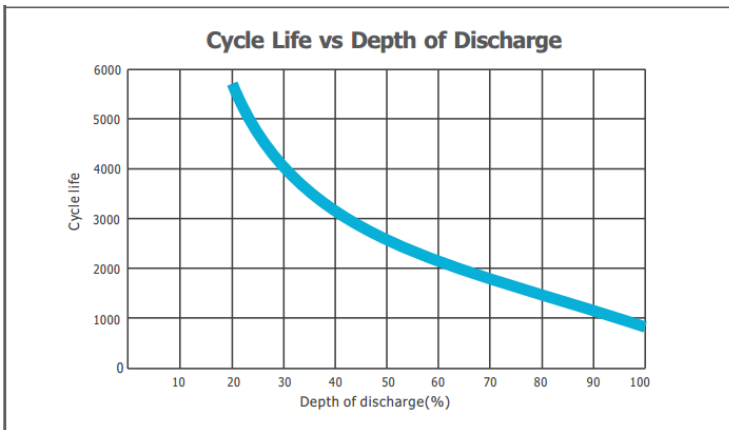
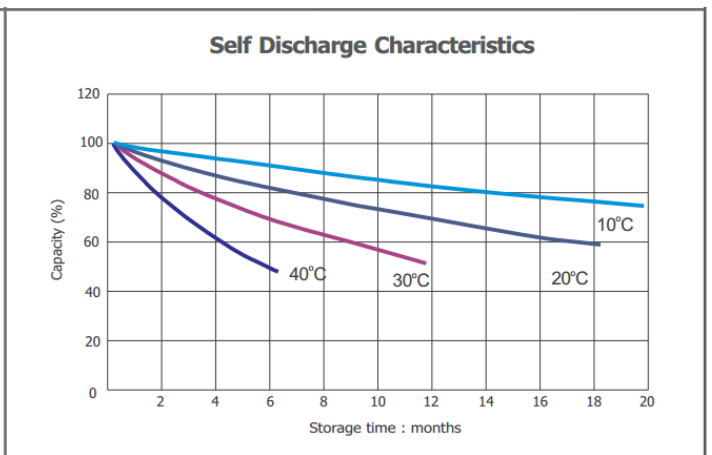
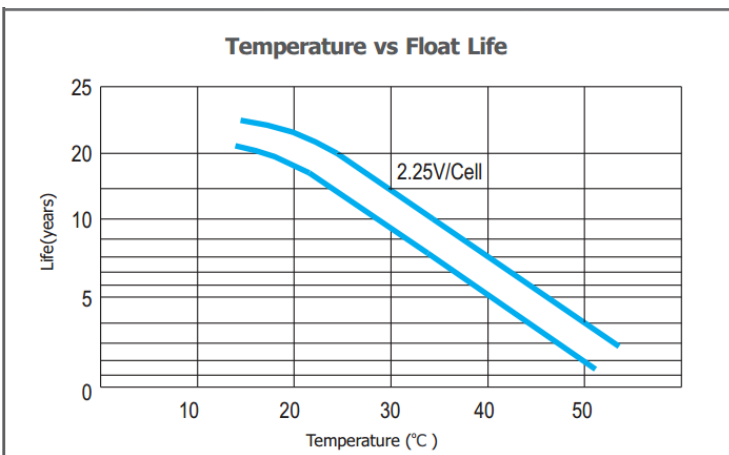
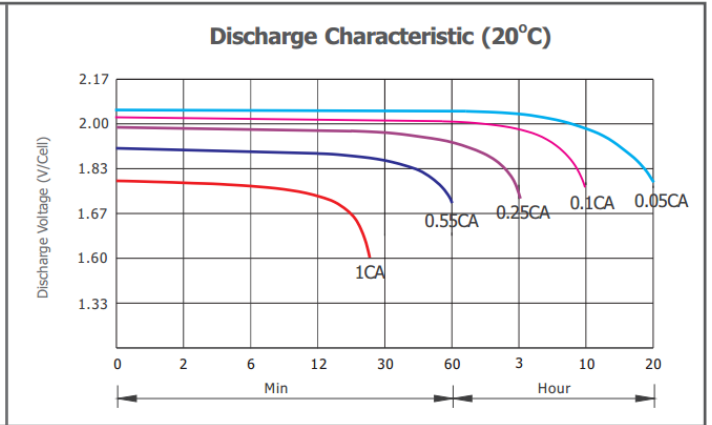
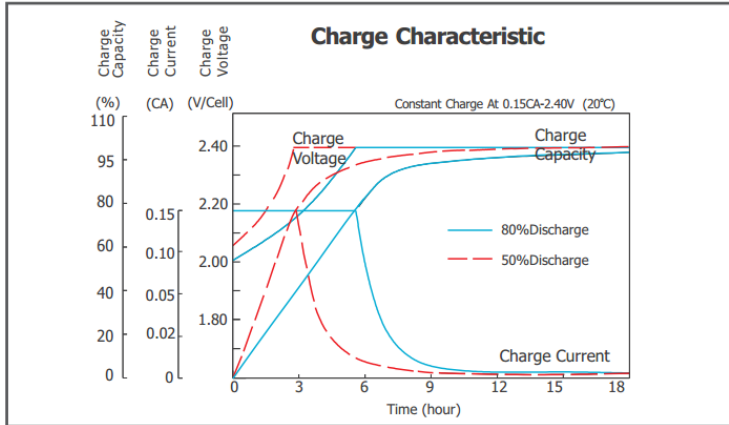
Technical Specifications

Nominal Voltage.....	2V(1 cells per unit)
Nominal Capacity(20°C).....	700Ah
Dimension(mm).....	L254 x W210 x H471 x TH506mm
Approx. Weight	52.0kg (114.64lbs)
Terminal Type.....	Female Copper Insert M8(torque:10~12N.m)
Internal Resistance.....	0.6mΩ(fully Charged @20°C)
Max.Charge Current.....	140A
Max.Discharge Current (5s).....	2000A
Short Circuit Current.....	3300A
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	257	250	233	196	167	140	104	74.1	61.3
1.87V	350	327	289	229	187	154	112	78.8	64.8
1.85V	402	369	317	250	206	166	120	82.4	67.3
1.83V	469	411	343	275	220	175	123	85.0	68.6
1.80V	525	476	384	303	232	184	125	86.1	70.0
1.75V	556	523	450	330	242	189	127	87.5	72.1
1.70V	605	574	495	349	251	193	130	88.9	73.5
1.65V	707	646	539	371	258	196	132	90.3	74.9
1.60V	770	709	572	383	264	200	135	92.0	76.3

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

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.90V	496	483	454	385	330	279	208	149	124
1.87V	663	621	554	442	365	304	223	157	130
1.85V	752	692	600	477	397	323	235	163	134
1.83V	866	761	641	520	420	338	238	167	135
1.80V	955	871	708	566	438	351	240	167	136
1.75V	996	941	819	607	451	355	242	168	139
1.70V	1069	1019	887	633	463	358	243	169	140
1.65V	1227	1129	952	664	470	360	246	170	142
1.60V	1309	1214	991	673	473	361	248	171	143

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	C20 (Ah)	C24 (Ah)	C48 (Ah)	C72 (Ah)	C100 (Ah)	C120 (Ah)	C240 (Ah)
OPzV2-700	758	791	854	880	887	897	912
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