

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	770Ah 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

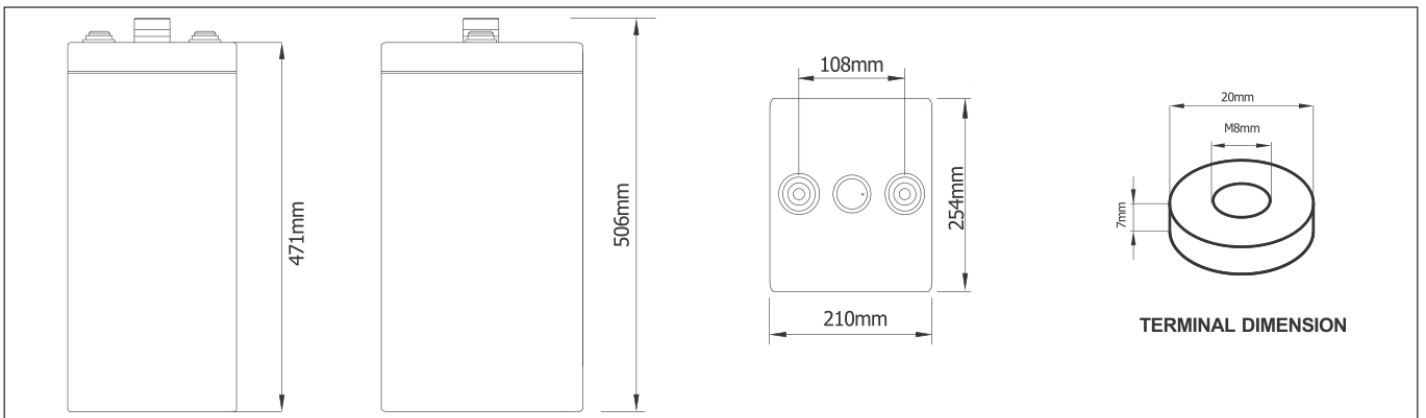
Applications

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

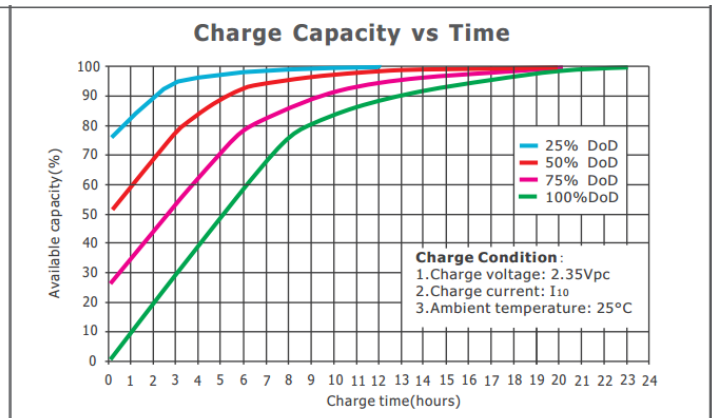
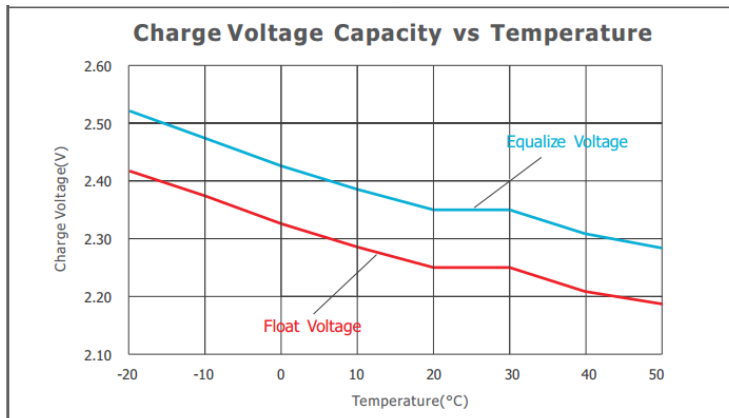
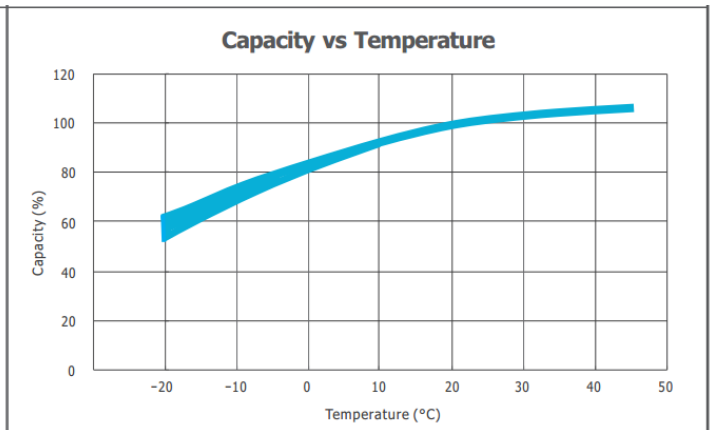
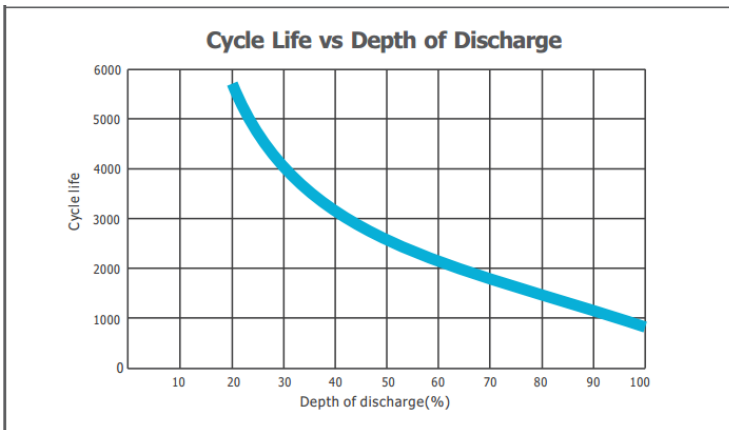
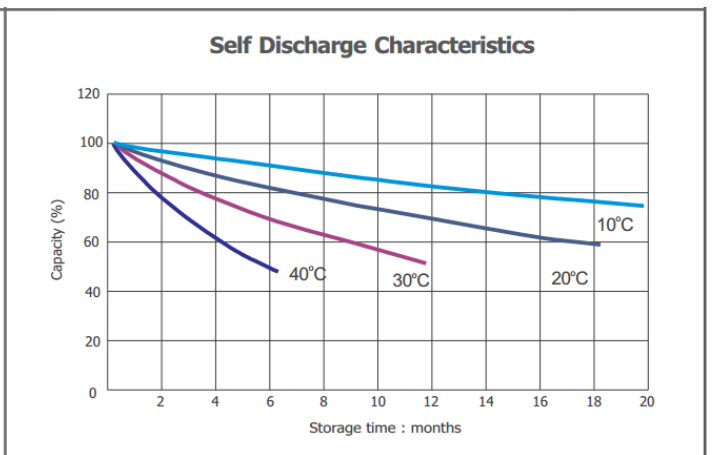
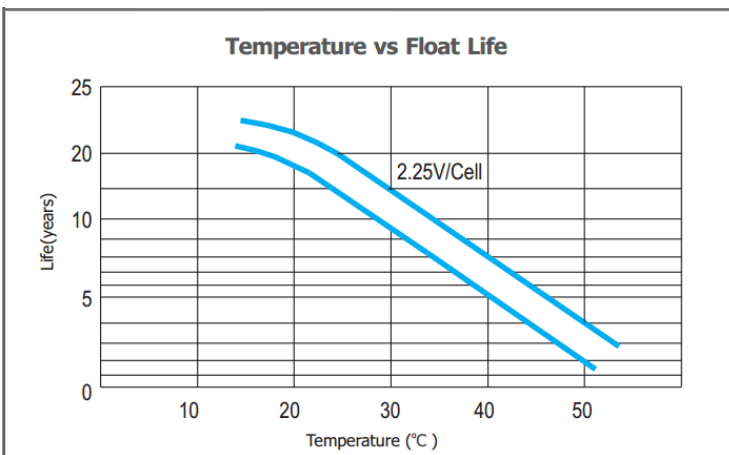
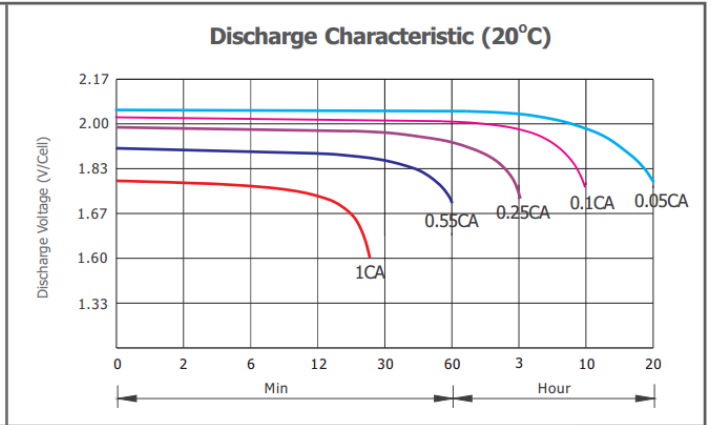
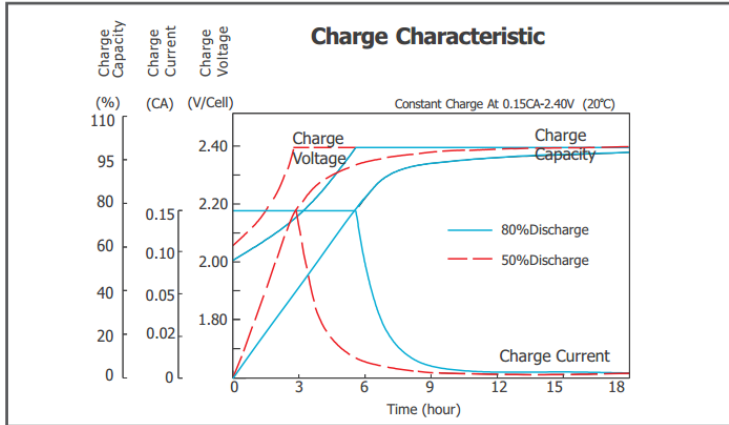
Technical Specifications

Nominal Voltage.....	2V(1 cells per unit)
Nominal Capacity(20°C).....	770Ah
Dimension(mm).....	L254 x W210 x H471 x TH506mm
Approx. Weight	54.0kg (114.64lbs)
Terminal Type.....	Female Copper Insert M8(torque:10~12N.m)
Internal Resistance.....	0.55mΩ(fully Charged @20°C)
Max.Charge Current.....	154A
Max.Discharge Current (5s).....	2000A
Short Circuit Current.....	3600A
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	283	275	257	216	184	154	114	81.6	67.4
1.87V	385	359	318	252	205	170	124	86.6	71.2
1.85V	443	406	349	275	226	183	132	90.6	74.0
1.83V	516	452	377	303	242	193	135	93.5	75.5
1.80V	577	524	422	334	255	202	137	94.7	77.0
1.75V	612	575	495	363	266	208	140	96.3	79.3
1.70V	666	631	544	384	277	212	142	97.8	80.9
1.65V	778	711	593	408	284	216	146	99.3	82.4
1.60V	847	780	629	421	290	219	149	101	83.9

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

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.90V	545	532	500	423	363	307	228	164	136
1.87V	729	683	610	486	401	334	246	173	143
1.85V	827	761	660	524	437	356	259	180	147
1.83V	952	838	705	572	462	372	262	184	149
1.80V	1051	958	779	622	482	386	264	184	150
1.75V	1096	1035	901	668	496	390	266	185	153
1.70V	1176	1121	976	696	509	393	268	186	155
1.65V	1349	1242	1047	731	517	396	270	187	156
1.60V	1440	1336	1090	741	520	397	273	188	157

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)
OPzV2-770	834	870	939	968	975	987	1004
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