

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	600Ah 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

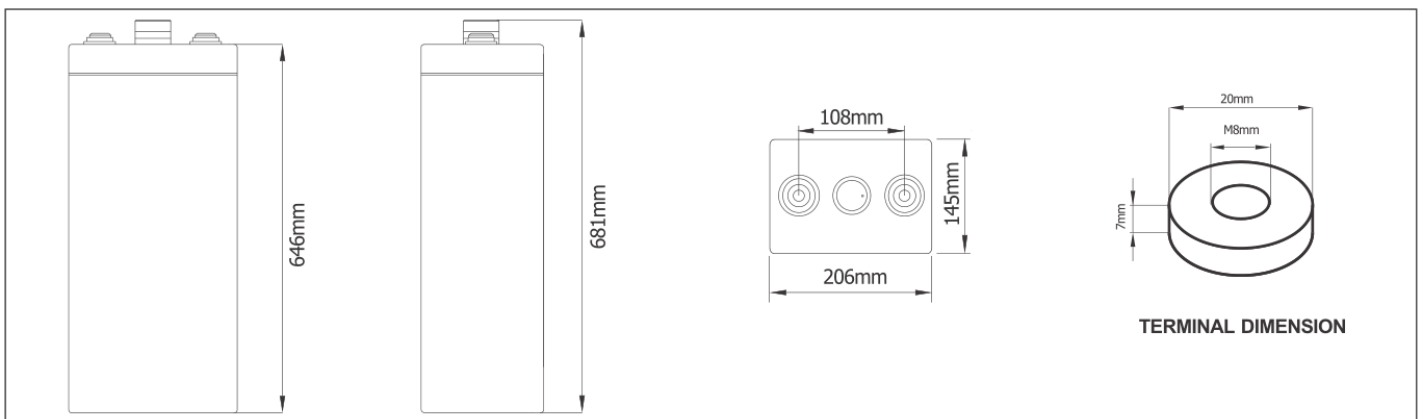
Applications

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

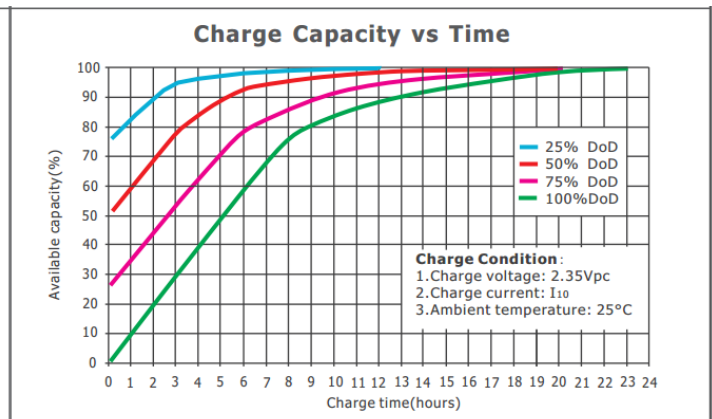
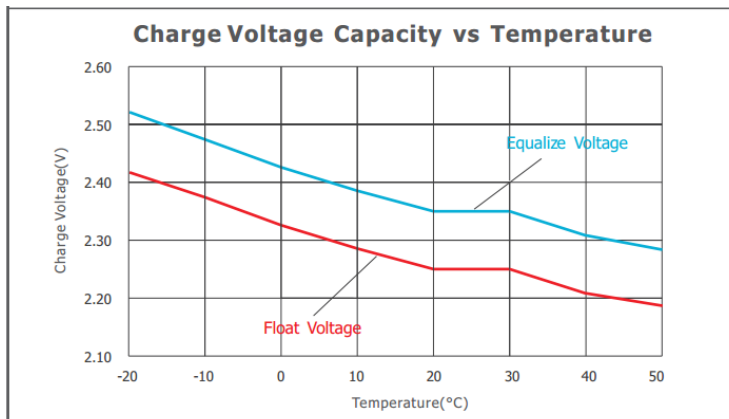
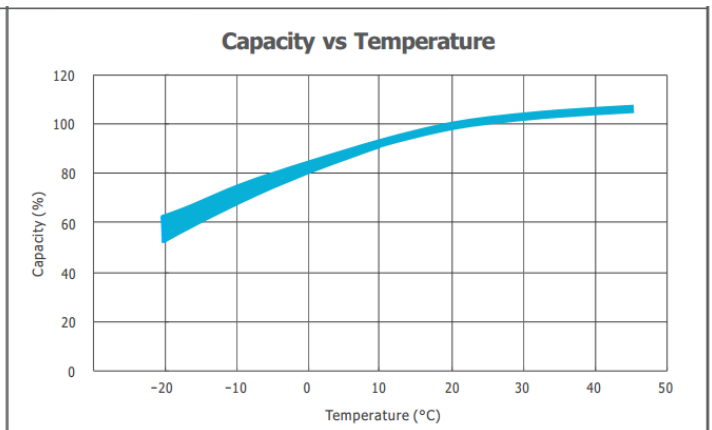
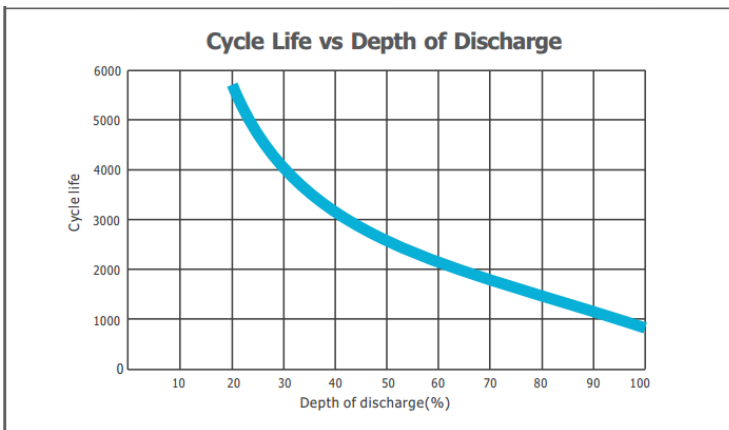
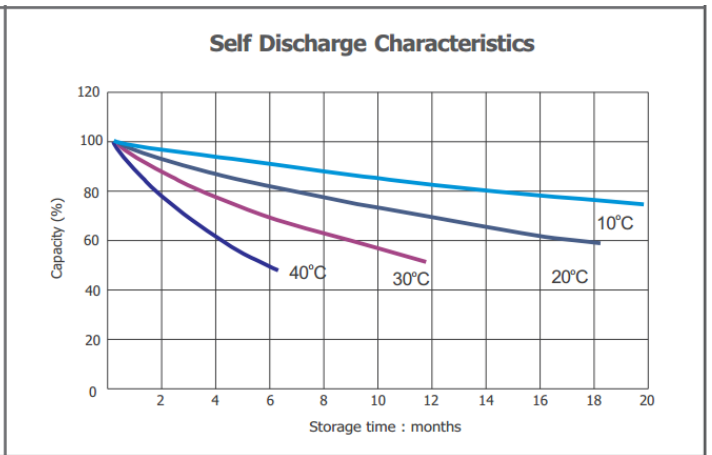
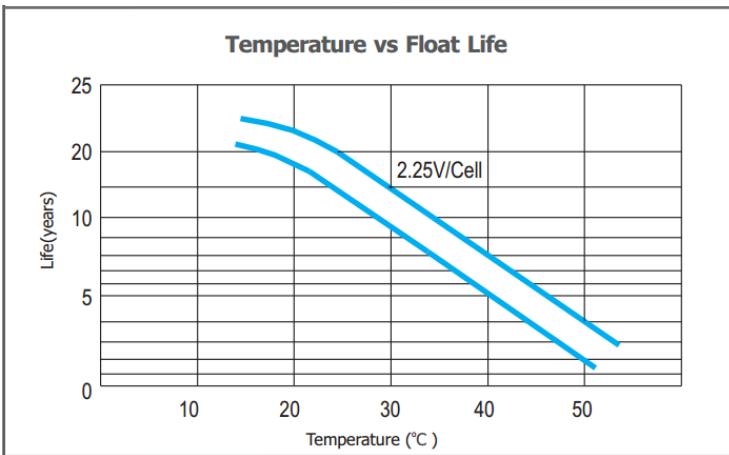
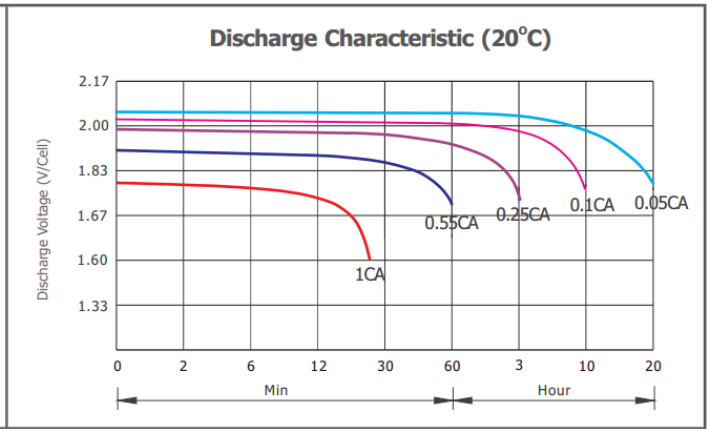
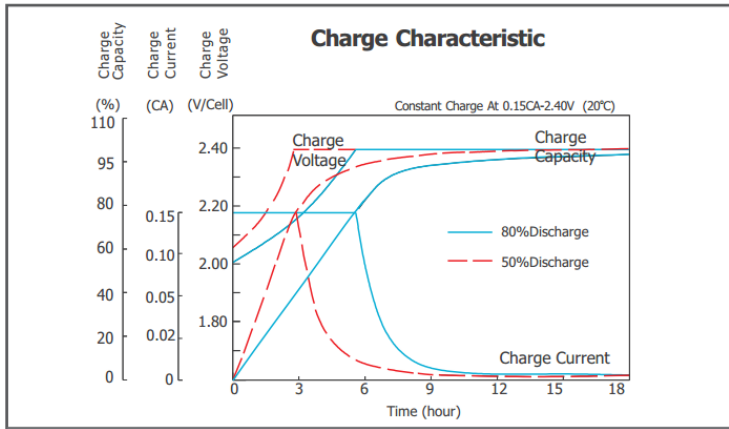
Technical Specifications

Nominal Voltage.....	2V(1 cells per unit)
Nominal Capacity(20°C).....	600Ah
Dimension(mm).....	L145 x W206 x H645x TH681mm
Approx. Weight	26.81kg (44.2lbs)
Terminal Type.....	Female Copper Insert M8(torque:10~12N.m)
Internal Resistance.....	0.63mΩ(fully Charged @20°C)
Max.Charge Current.....	120A
Max.Discharge Current (5s).....	2000A
Short Circuit Current.....	3100A
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	220	214	200	168	143	120	88.9	63.6	52.5
1.87V	300	280	248	196	160	132	96.4	67.5	55.5
1.85V	345	316	272	214	176	142	103	70.6	57.7
1.83V	402	352	294	236	188	150	105	72.9	58.8
1.80V	450	408	329	260	199	158	107	73.8	60.0
1.75V	477	448	386	283	208	162	109	75.0	61.8
1.70V	519	492	424	299	216	165	111	76.2	63.0
1.65V	606	554	462	318	222	168	113	77.4	64.2
1.60V	660	608	490	328	226	171	116	78.9	65.4

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

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.90V	425	414	389	330	283	239	178	128	106
1.87V	568	533	475	379	313	260	191	135	111
1.85V	644	593	514	409	341	277	202	140	115
1.83V	742	653	549	445	360	290	204	142	116
1.80V	819	746	607	485	375	301	206	143	117
1.75V	854	806	702	520	386	304	207	144	119
1.70V	917	873	761	543	397	307	209	145	120
1.65V	1051	968	816	569	403	308	210	146	121
1.60V	1122	1041	849	577	405	309	213	147	122

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)
OPzV2-600	650	678	732	754	760	769	782
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