

The OPzS series is a traditional tubular plate flooded battery which offers 20+ years design life According to the standard IEC60896-11. With a new design and technical improvement, it offers maximum efficiency and reliability for the widest variety of applications. This series is highly suited for all standby power applications that require the highest levels of reliability and security.

2V Voltage	250Ah Capacity	Tubular Flooded	20+years Design life
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- Complied standards**
- IEC 60896-11
 - DIN40736
 - IEC61427
 - Eurobat guide, long life

Features and Benefits

- Tubular positive plate with prolonged cycle life
- Wide operating temperature range from -40°C to 60°C
- Tubular positive plate with prolonged cycle life
- Lead calcium die cast grid with improved corrosion resistance capability
- Dry charged package and delivery ensure longer shelf life
- Explosive-proof with special designed vented plug
- Excellent deep discharge recovery capability

Construction

- Positive plate Tubular plate with die cast Pb-Ca alloy grid
- Negative plate - Balanced Pb-Ca grid for improved recombination

Efficiency

- Separator - Leaf shape rubber separator
- Electrolyte - Dilute high purity sulphuric acid of 1.240 specific Gravity
- Battery container is SAN, cover is ABS
- Pillar seal - 100% factory tested, proven two layers epoxy resin Seal
- Relief valve - Complete with integrated flame arrestor

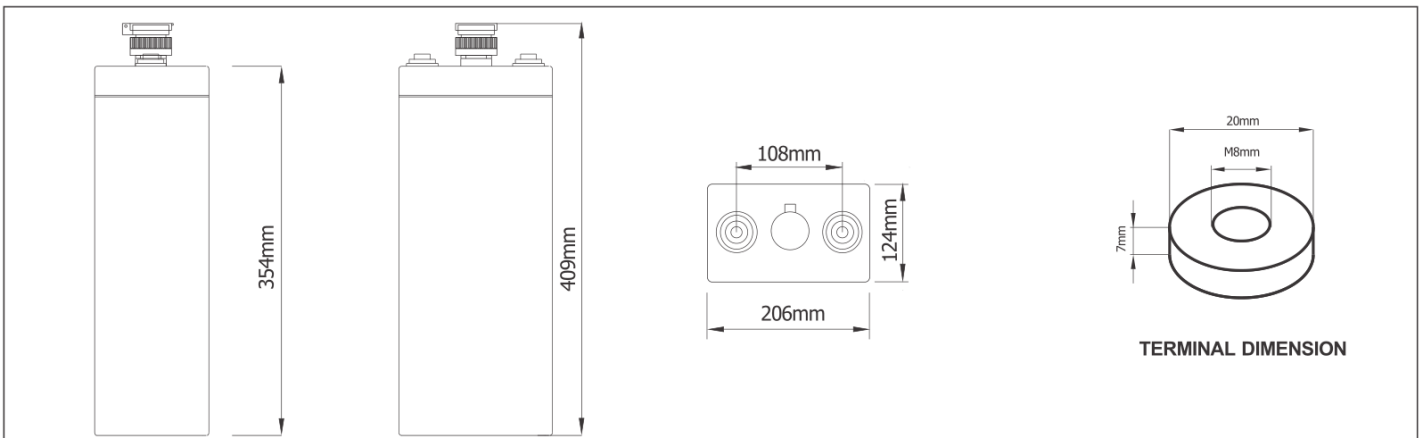
Applications

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

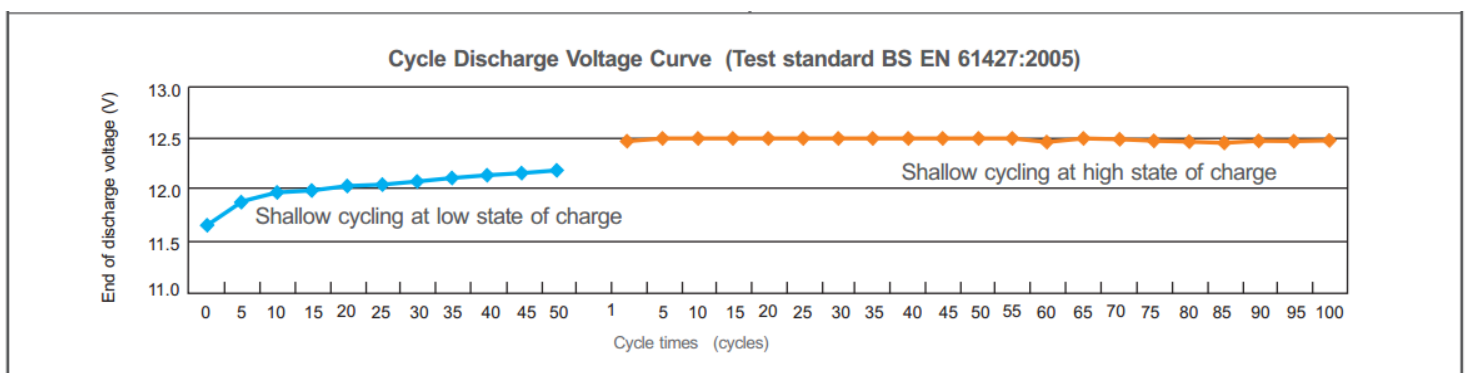
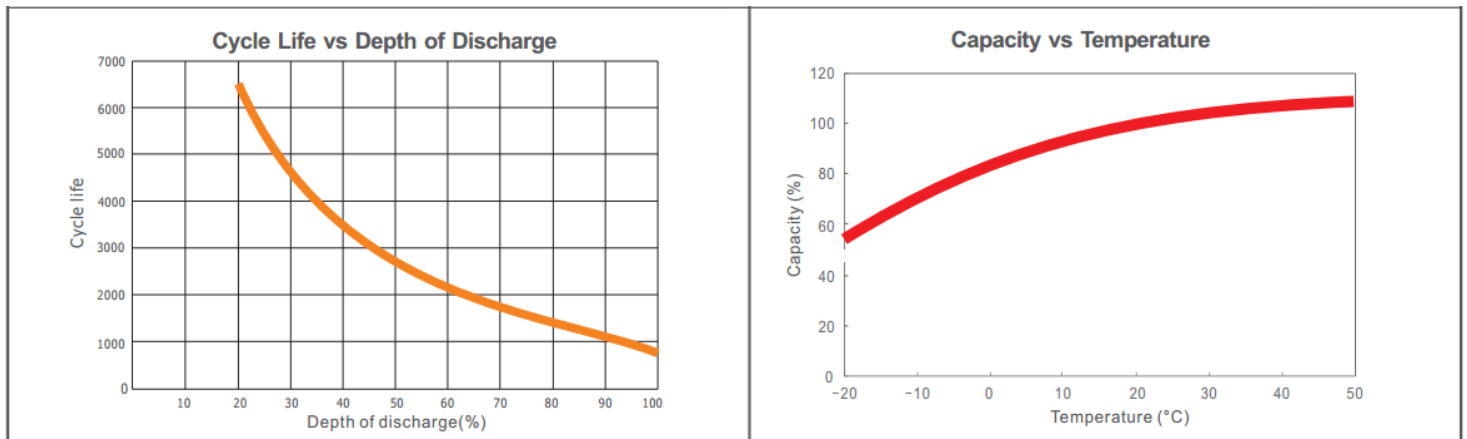
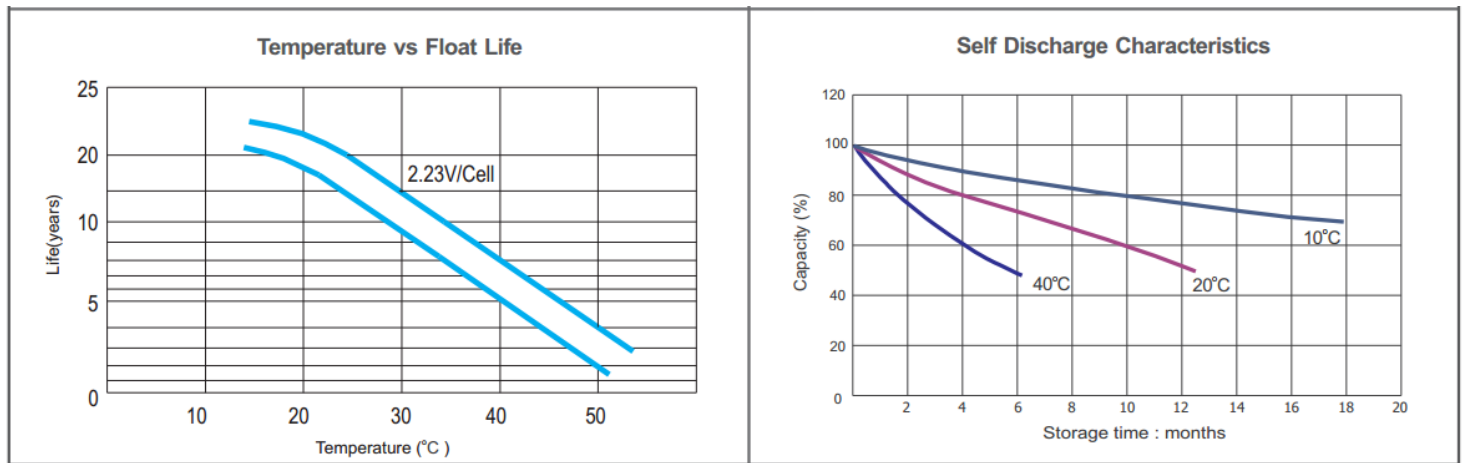
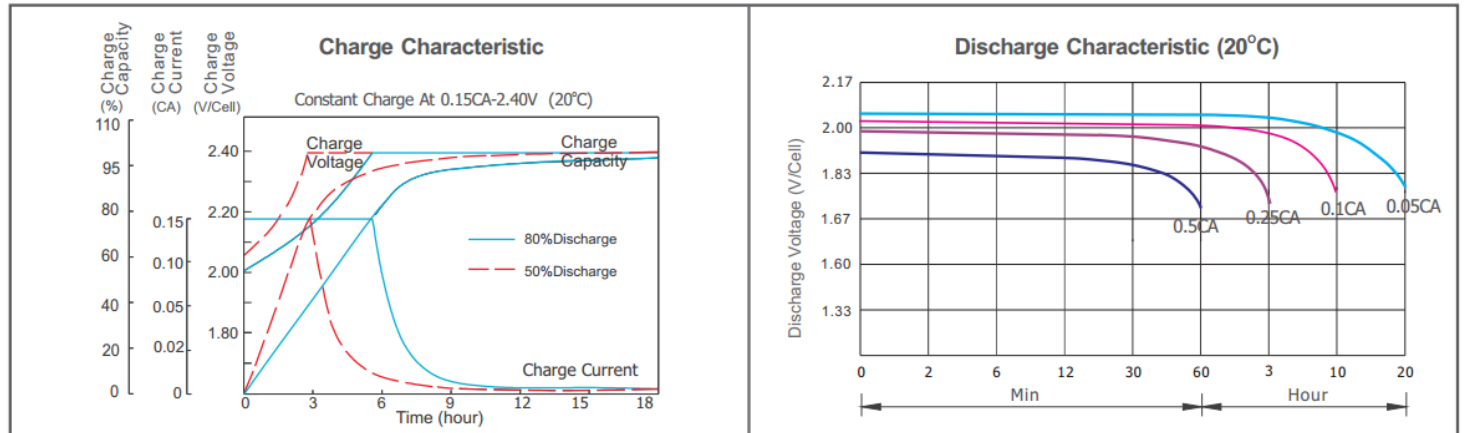
Technical Specifications

Nominal Voltage.....	2V(1 cells per unit)
Nominal Capacity(20°C).....	250Ah
Dimension(mm).....	L124 x W206 x H354 x TH409mm
Approx. Weight	
Without electrolyte.....	15.5kg (34.2lbs)
With electrolyte.....	20.5kg (45.2lbs)
Electrolyte(Diluted sulphuric acid of 1.240g/cm ³ (20°C)).....	5.0kg
Terminal Type.....	Female Copper Insert M8(torque:10~12N.m)
Internal Resistance.....	0.72mΩ(fully Charged @20°C)
Max.Charge Current.....	50A
Max.Discharge Current (5s).....	1000A
Short Circuit Current.....	2750A
Ambient Temperature	
Discharge.....	-25-65°C
Charge.....	-20-65°C
Storage.....	-15-40°C
Capacity Affected by Temp.(10 hour)	
105% @40°C	
85% @0°C	
60% @-20°C	
Self-Discharge @20°C.....	Approx.4% per month
Charge Voltage @20~25°C	
Float charge voltage.....	2.21V-2.25V
Equalize Charge Voltage.....	2.35V-2.40V

Dimensions



Performance Characteristics



Battery Discharge

Discharge Constant Current per Cell (Amperes at 25° C)

F.V./Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.90V	99.8	90.8	82.5	80.8	74.8	58.5	47.3	39.8	34.8	25.8	22.8	12.5
1.85V	108	103	102	101	85.0	64.8	52.3	44.0	40.8	27.3	23.8	13.1
1.80V	172	165	162	139	109	76.3	64.0	50.0	43.3	30.8	25.0	13.8
1.75V	207	198	192	159	122	82.5	66.3	52.0	44.5	31.3	25.8	14.4

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

F.V./Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.90V	194	176	158	153	144	125	103	86.8	74.5	54.3	47.0	25.2
1.85V	209	201	195	190	164	141	108	96.5	82.8	59.3	51.0	27.5
1.80V	334	320	275	254	214	171	137	112	94.5	66.8	55.0	28.5
1.75V	401	384	282	256	216	178	145	118	98.8	67.8	57.3	29.2

Long time discharge capacity for solar & wind applications

Capacity	C ₂₄ (Ah)	C ₄₈ (Ah)	C ₇₂ (Ah)	C ₁₀₀ (Ah)	C ₁₂₀ (Ah)	C ₂₄₀ (Ah)
OPzS2-250	283	310	325	338	343	350
Final Voltage	1.85 V					

Solar & wind applications parameters settings

Over voltage disconnect:	2.47±0.01V/cell @ 20~25°C
Regulation/equalize voltage:	2.40±0.01V/cell @ 20~25°C
Array reconnection voltage:	2.23±0.005V/cell @ 20~25°C
Float voltage setting:	2.25±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:	-4mV/cell/°C