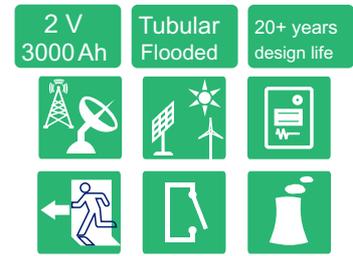


3E Tubular Series

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 and security of reliability.

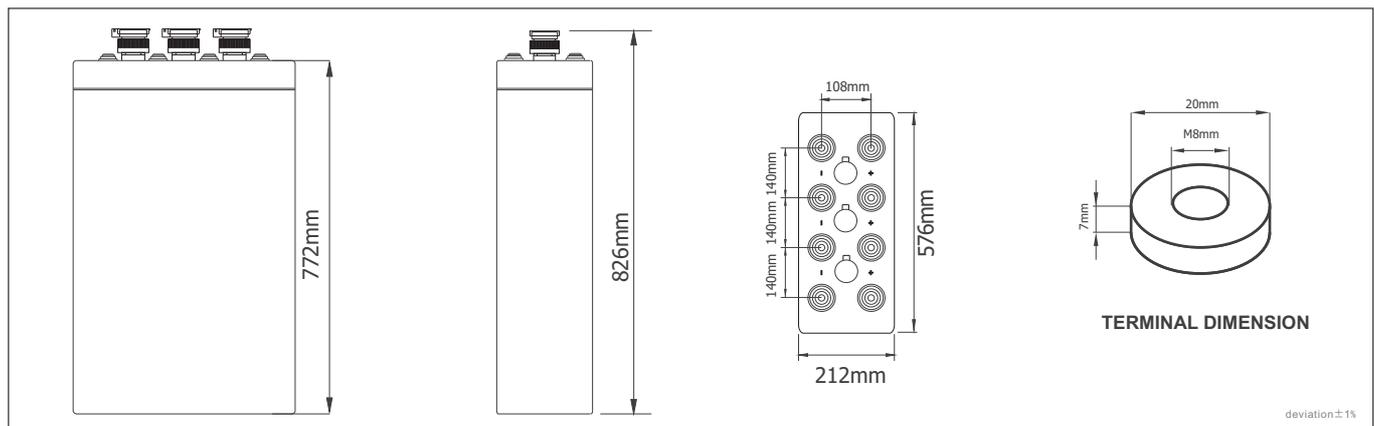


TECHNICAL SPECIFICATIONS

Nominal Voltage (V)	2
Designed Floating Life (20°C)	20+ Years
Nominal Capacity (20°C)	3000 Ah @ C10 (to 1.80Vpc)
Dimensions	L576mm × W212mm × H826mm
Approx. Weight	Without electrolyte: 155Kg(342lbs) With electrolyte: 218Kg (481lbs)
Electrolyte	Diluted sulphuric acid of 1.240 g/cm ³ (20°C) Acid weight: 63Kg
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.32mOhm (fully charged @ 20°C)
Max. Charge Current	600 A
Max. Discharge Current (5S)	4000 A
Short Circuit Current	7200 A
Self Discharge	Approx. 4% per month @ 20°C
Ambient Temperature	Discharge: -25~65°C Charge: -20~65°C Storage: -15~40°C
Float Charge Voltage (20~25°C)	2.21-2.25V (-3mV /°C/ cell)
Equalize Charge Voltage (20~25°C)	2.35-2.40V (-5mV /°C/ cell)
Container Material	SAN



BATTERY DIMENSIONS



BATTERY DISCHARGE TABLE

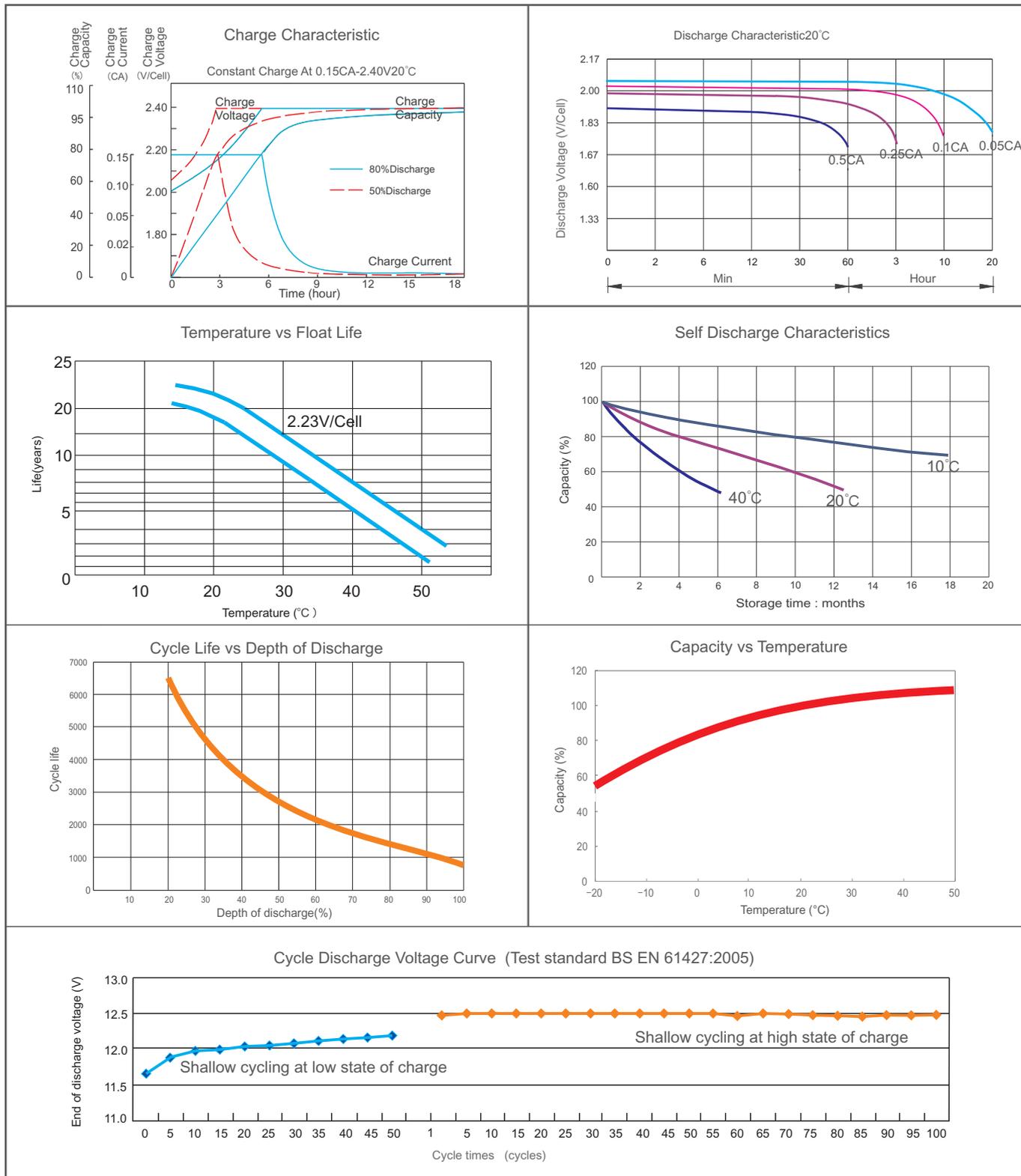
Constant Current Discharge Characteristics: Amps (20°C)

F.V./Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8 h	10 h	20h
1.90V	958	871	792	775	897	702	567	477	417	309	273	150
1.85V	1034	991	974	970	1020	777	627	528	489	327	285	157
1.80V	1651	1584	1550	1334	1311	915	768	600	519	369	300	165
1.75V	1982	1901	1843	1526	1461	990	795	624	534	375	309	173

Constant Power Discharge Characteristics: W/cell (20°C)

F.V./Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8 h	10 h	20h
1.90V	1974	1795	1612	1558	1725	1500	1233	1041	894	651	564	302
1.85V	2132	2045	1986	1935	1962	1695	1290	1158	993	711	612	329
1.80V	3404	3267	2800	2591	2571	2055	1641	1341	1134	801	660	342
1.75V	4085	3919	2871	2609	2592	2136	1737	1419	1185	813	687	351

CHARACTERISTICS



Long time discharge capacity for Solar & Wind applications

Capacity	C24 (Ah)	C48 (Ah)	C72 (Ah)	C100 (Ah)	C120 (Ah)	C240 (Ah)
OPzS2-3000	3390	3720	3900	4050	4110	4200
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