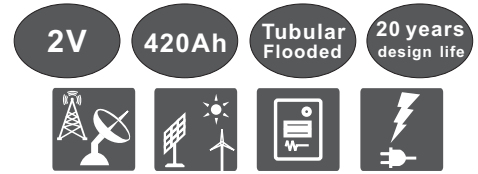


## 2V TUBULAR FLOODED SERIES BATTERY

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.



### SPECIFICATIONS

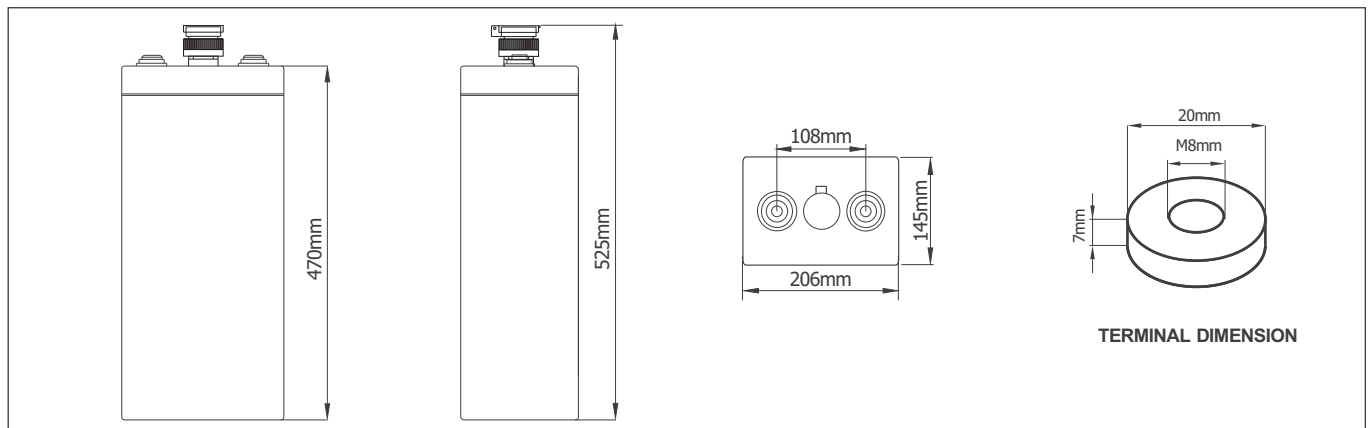
Nominal Voltage (V)	2
Designed Floating Life (20°C)	20+ Years
Nominal Capacity (20°C)	420 Ah @ C <sub>10</sub> (to 1.80Vpc)
Dimensions	L145mm × W206mm × H525mm
Approx. Weight	Without electrolyte: 24.5Kg (54.2 lbs) With electrolyte: 33.0Kg (72.8 lbs)
Electrolyte	Diluted sulphuric acid of 1.240 g/cm <sup>3</sup> (20°C) Acid weight: 8.5Kg
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.80mOhm (fully charged @ 20°C)
Max. Charge Current	84 A
Max. Discharge Current (5S)	2000 A
Short Circuit Current	3000 A
Self Discharge	Approx. 3% per month @ 20°C
Ambient Temperature	Discharge: -20~50°C Charge: -15~50°C Storage: 0~25°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



### Complied standards

- IEC 60896-11
- DIN40736
- IEC61427
- Eurobat guide, long life
- BS6290 part 4
- UL1989

### DIMENSIONS



### BATTERY DISCHARGE TABLE

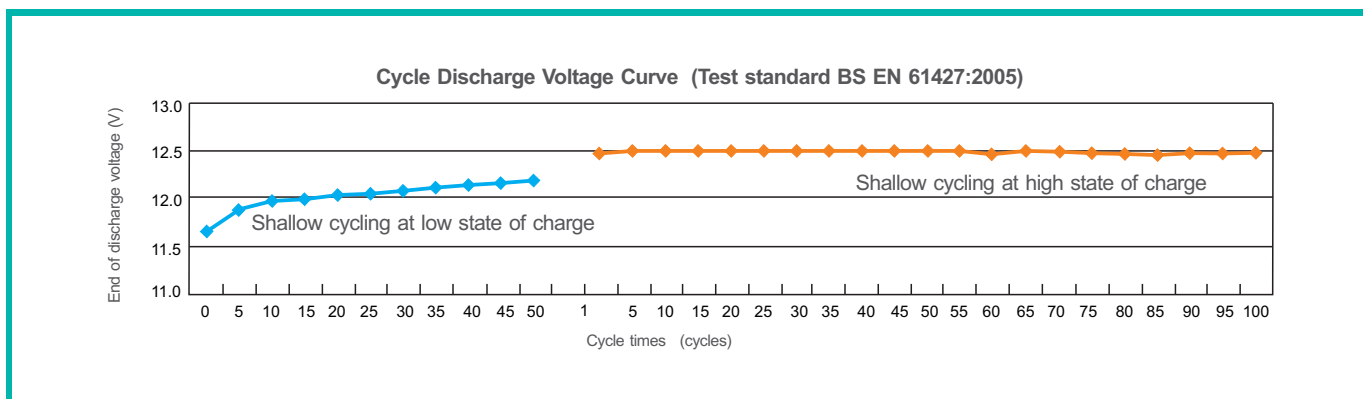
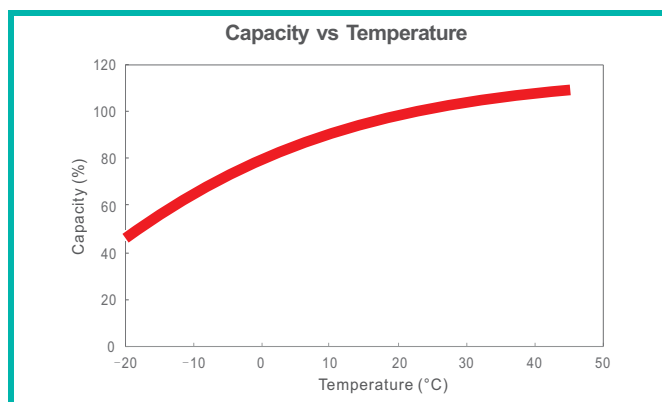
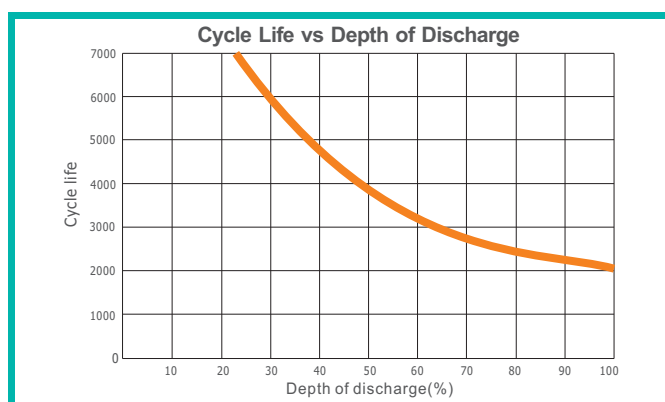
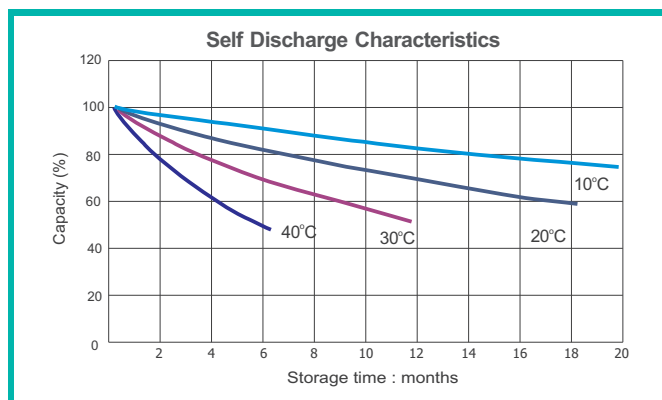
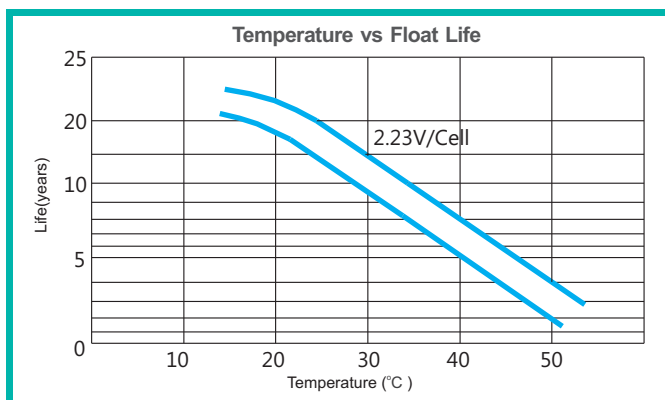
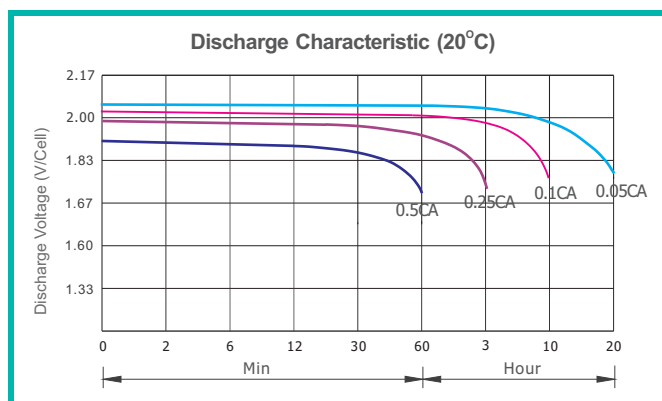
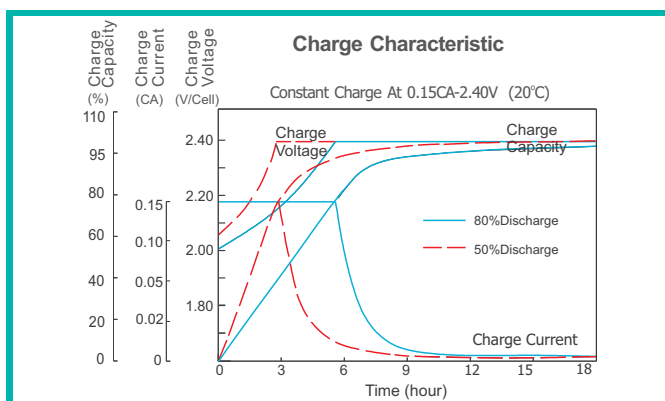
#### Constant Current Discharge Characteristics: Amps (20°C)

F.V./Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8 h	10 h	20h	48h	72h	100 h	120h
1.90V	168	152	139	136	126	98.3	79.4	66.8	58.4	43.3	38.2	21.0	10.4	7.25	5.33	4.54
1.85V	181	173	171	170	143	109	87.8	73.9	68.5	45.8	39.9	21.9	10.8	7.56	5.67	4.79
1.80V	289	277	271	234	184	128	108	84.0	72.7	51.7	42.0	23.1	11.4	7.96	5.88	4.96
1.75V	347	333	323	267	205	139	111	87.4	74.8	52.5	43.3	24.3	11.7	8.20	6.01	5.03

#### 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	48h	72h	100 h	120h
1.90V	325	296	265	257	242	210	173	146	125	91.1	79.0	42.3	21.4	15.0	11.6	9.64
1.85V	351	337	327	319	275	237	181	162	139	100	85.7	46.1	23.2	16.2	12.0	10.0
1.80V	561	538	461	427	360	288	230	188	159	112	92.4	47.9	23.9	16.8	12.3	10.3
1.75V	673	646	473	430	363	299	243	199	166	114	96.2	49.1	24.8	17.4	12.4	10.4

## CHARACTERISTICS



### 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	$\geq 1.90$ Vpc	$\geq 1.85$ Vpc	$\geq 1.80$ Vpc	$\geq 1.75$ Vpc	$\geq 1.7$ Vpc	$\geq 1.6$ Vpc