

OPzV Series Battery

SPACEFLIGHT OPzV Series battery is Tubular GEL battery, designed with an innovative tubular plates which provide greater capacity and enhanced cycle life. The battery has been specifically designed for longer life, greater reliability and strong resilience to high temperature making them ideal for critical power applications and energy storage.

Applications

- Solar and wind power systems
- Uninterruptible power supplies
- Communication systems
- Telecommunication systems
- Emergency Power Systems

General Features

- 20 years design life(25 °C)
- Non-spillable construction
- Sealed and maintenance-free
- Advanced tubular positive plates
- Excellent recovery from deep discharge
- Longer Life and low self-discharge

Standards

- Compliance with IEC, BS, JIS and EU standards.
- UL, CE Certified
- ISO45001,ISO9001 and ISO14001 certified production facilities

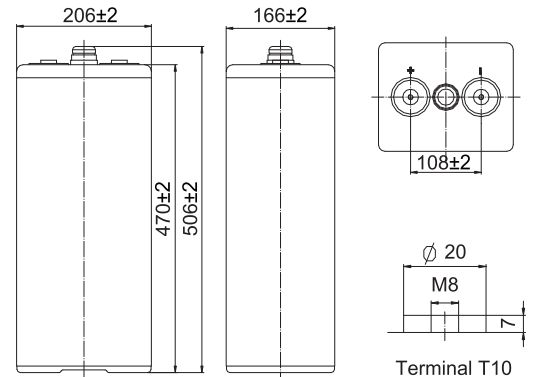
Specifications

Rated Voltage	2V	
Nominal Capacity	490Ah	(C ₁₀ , 1.80V)
Approx Weight	37.50kg±3%(82.67lbs)	
Terminal	F28	
Rated Capacity(25°C)	612 Ah	(120hr,5.10A,1.85V)
	605 Ah	(100hr,6.05A,1.85V)
	490 Ah	(10hr,50A,1.80V)
	378 Ah	(3hr,126A,1.80V)
Max.Discharge/Charge Current	2500A(5s)/122.5A	
Max.Short Circuit Current	4607A	
Internal Resistance(25°C)	Approx 0.6mΩ	
Operating Temp.Range	Discharge	-20~60 °C(-4~140 °F)
	Charge	-10~50 °C(14~122 °F)
	Storage	-20~60 °C(-4~140 °F)
Nominal operating temperature	25±-5 °C	
Charge Voltage @25°C(77 °F)	Cycle Use	Initial Charging Current less than 122.5A. Voltage 2.4V~2.45V at 25°C(77°F)Temp. Coefficient -5mV/°C
	Standby Use	Initial Charging Current less than 122.5A. Voltage 2.25V~2.27V at 25°C(77°F)Temp. Coefficient -3mV/°C
Temperature effects on capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
	-15°C (5°F)	65%
Self Discharge(25°C)	Capacity after 3 months storage	91%
	Capacity after 6 months storage	82%
	Capacity after 12 months storage	65%



Dimensions

unit:mm



Length	206±2mm (8.11 inches)
Width	166±2mm (6.54 inches)
Container Height	470±2mm (18.5 inches)
Total Height	506±2mm (19.9 inches)

Battery Construction

Component	Positive plate	Negative plate	Container	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS(UL94-HB) or FR(UL94-V0)	Rubber	Copper	PVC-SiO ₂	Fumed Silicon

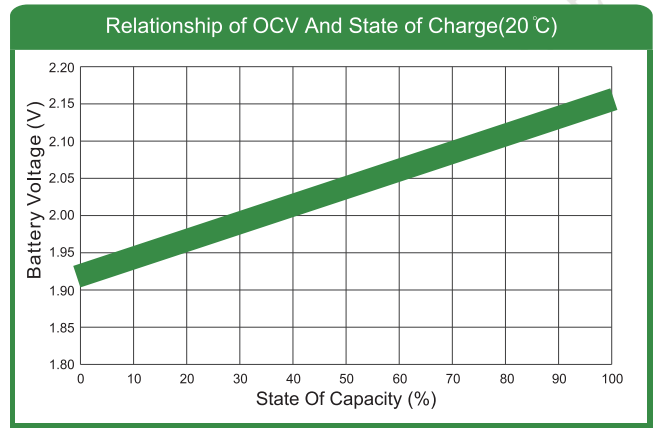
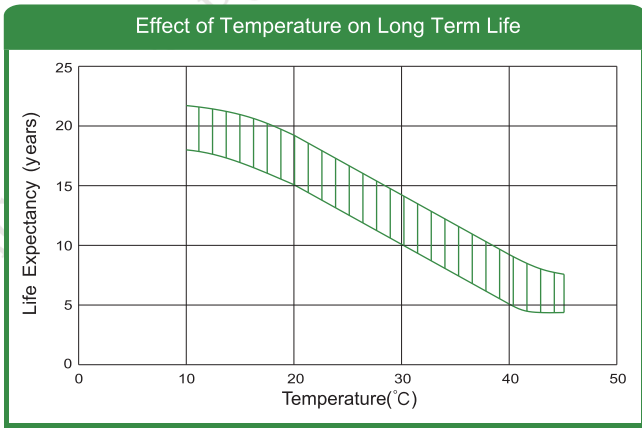
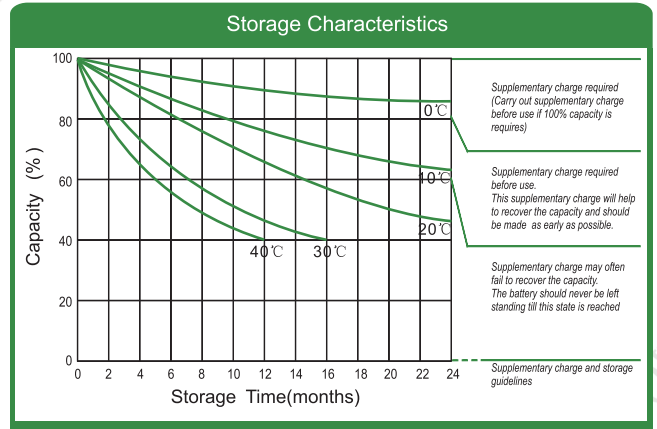
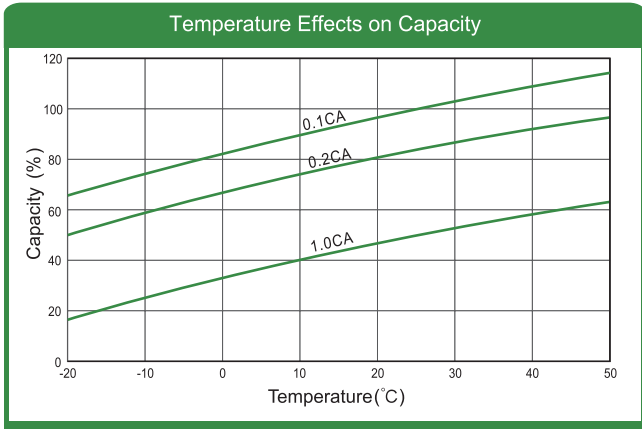
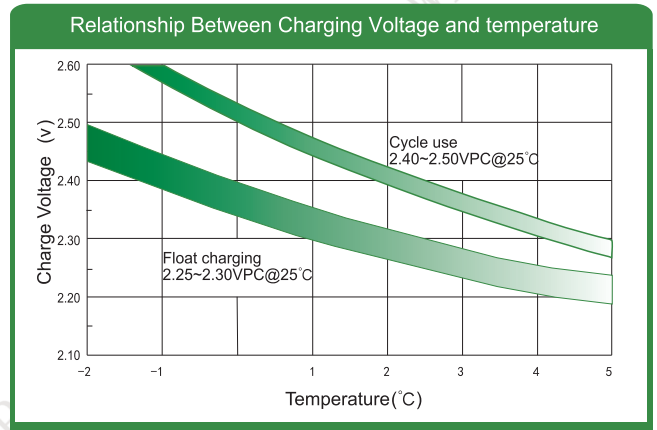
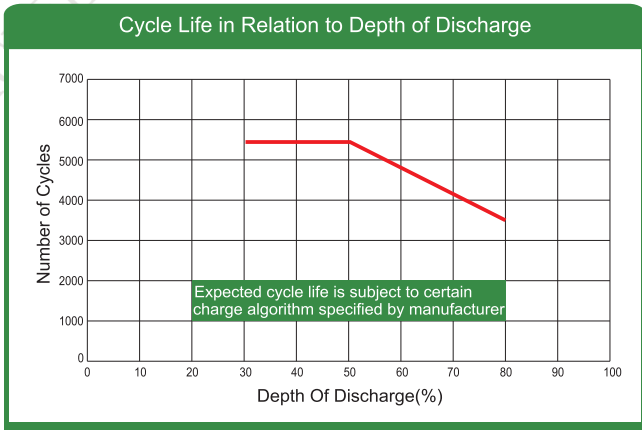
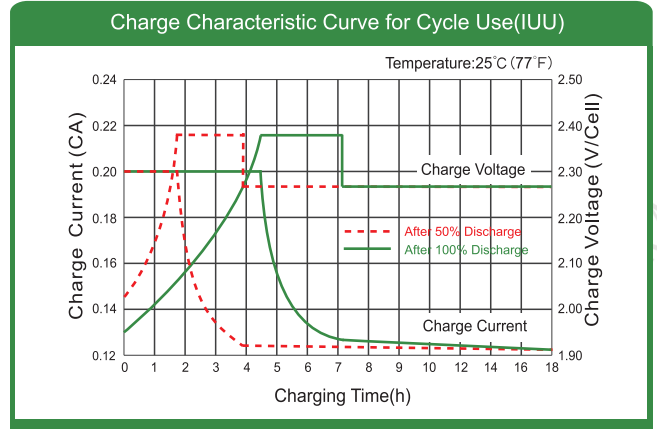
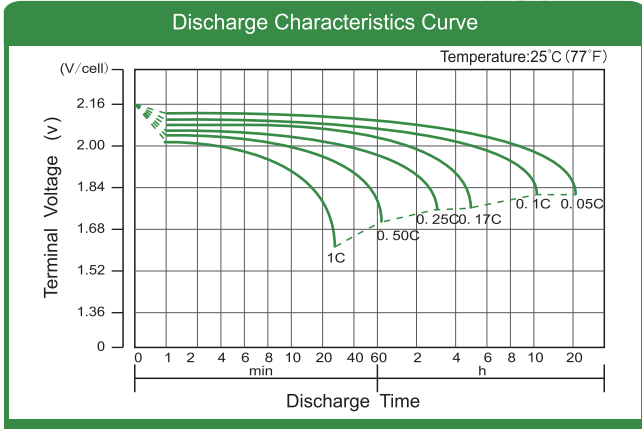
Constant Current Discharge (Amperes) at 25°C(77°F)

E.V/Time	30min	1h	3h	5h	10h	20h	48h	100h	120h
1.65V	417	281	132	91.0	51.0	26.9	/	/	/
1.70V	404	274	131	90.0	50.5	26.9	12.3	/	/
1.75V	394	268	130	89.5	50.5	26.7	12.2	/	/
1.80V	380	260	126	87.0	50.0	26.5	12.1	/	/
1.85V	361	247	120	82.5	47.5	25.2	11.9	6.05	5.10

Constant Power Discharge (Watts/cell) at 25°C(77°F)

E.V/Time	30min	1h	3h	5h	10h	20h	48h	100h	120h
1.65V	779	534	259	179	101	54.0	/	/	/
1.70V	755	520	257	178	101	53.5	24.8	/	/
1.75V	737	510	255	177	100	53.5	24.6	/	/
1.80V	710	494	247	171	100	53.0	24.5	/	/
1.85V	674	470	235	163	95.0	50.4	24.0	12.2	10.4

Note: The above characteristics data are average values obtained Within three charge/discharge cycles not the minimum.



Factory address: Fukang Industrial Zone, Longnan, Ganzhou, Jiangxi Province, China.
 Shenzhen Office: RM208-210, Building D, Tongju industrial Park, No.4, Longping WestRoad, Longgang District, Shenzhen.
 TEL: +86-755-28288189 sales@sfbattery.com www.sfbattery.com