

### 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

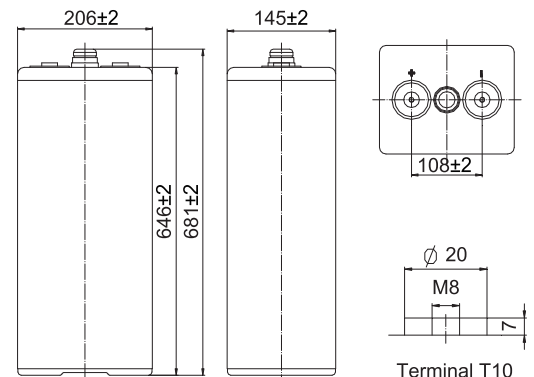
### Specifications

Rated Voltage	2V	
Nominal Capacity	600Ah	(C <sub>10</sub> , 1.80V)
Approx Weight	47.0kg±3%(103.62lbs)	
Terminal	F28	
Rated Capacity(25°C)	734.4 Ah	( 120hr,6.12A,1.85V)
	726 Ah	(100hr,7.26A,1.85V)
	600 Ah	(10hr,60A,1.80V)
	453 Ah	(3hr,151A,1.80V)
Max.Discharge/Charge Current	3000A(5s) / 150A	
Max.Short Circuit Current	3796A	
Internal Resistance(25°C)	Approx 0.55mΩ	
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 150A. Voltage 2.4V~2.45V at 25°C(77°F)Temp. Coefficient -5mV/°C
	Standby Use	Initial Charging Current less than 150A. 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	145±2mm (5.71 inches)
Container Height	646±2mm (18.5 inches)
Total Height	681±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 <sub>2</sub>	Fumed Silicon

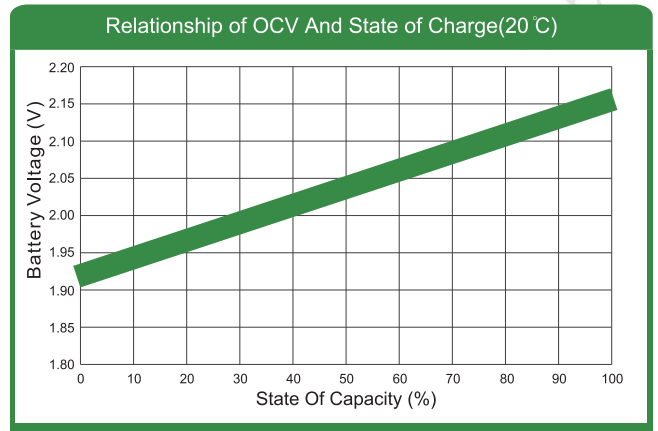
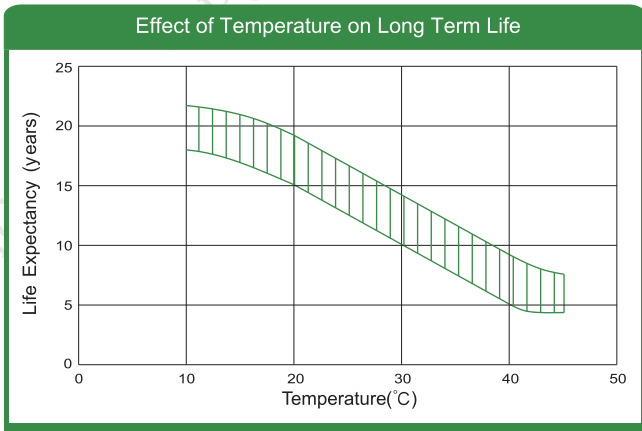
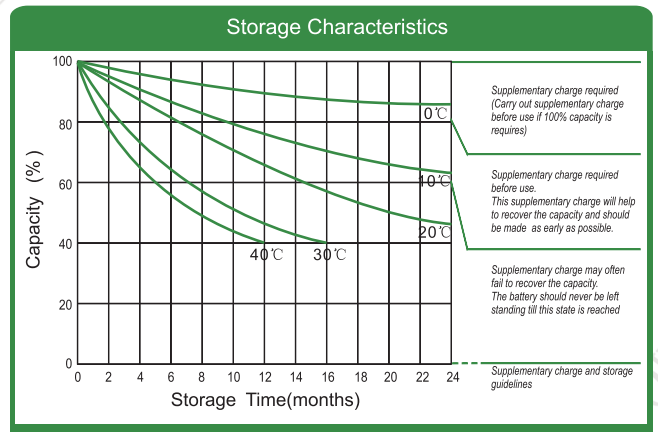
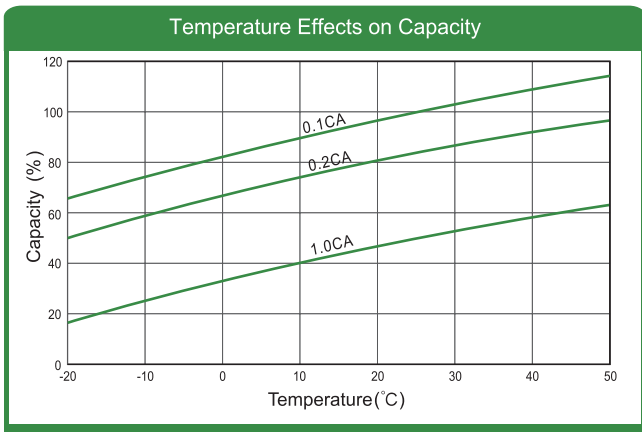
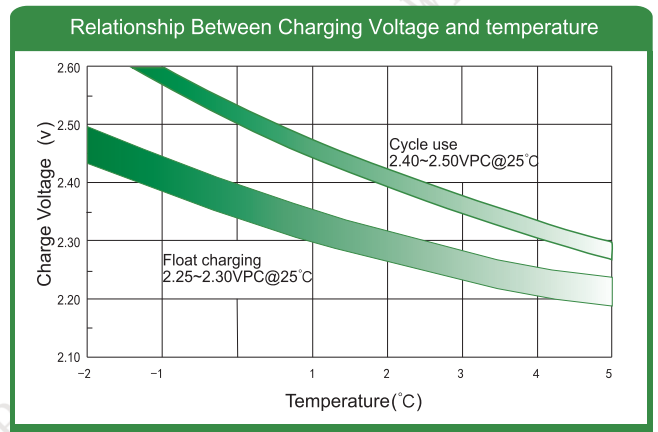
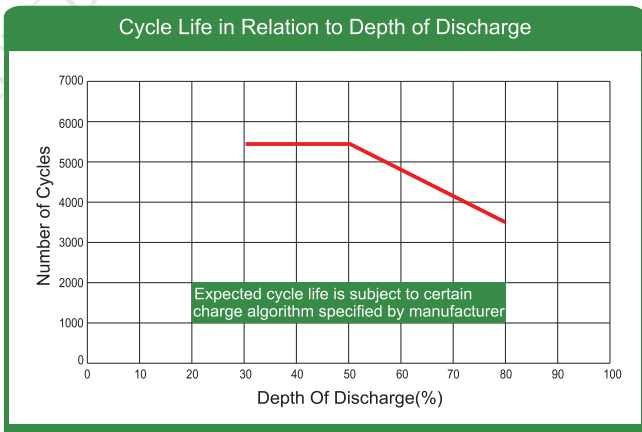
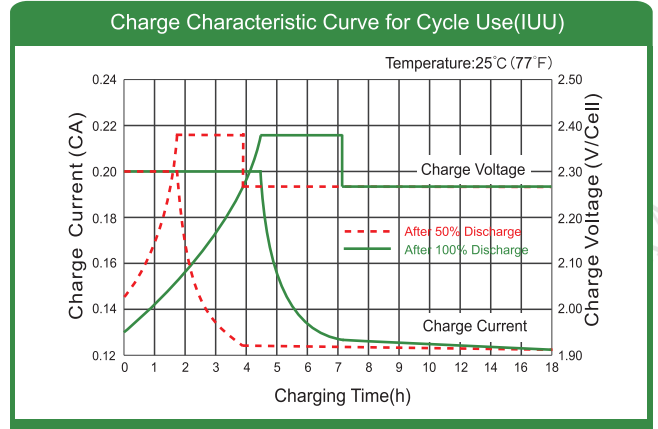
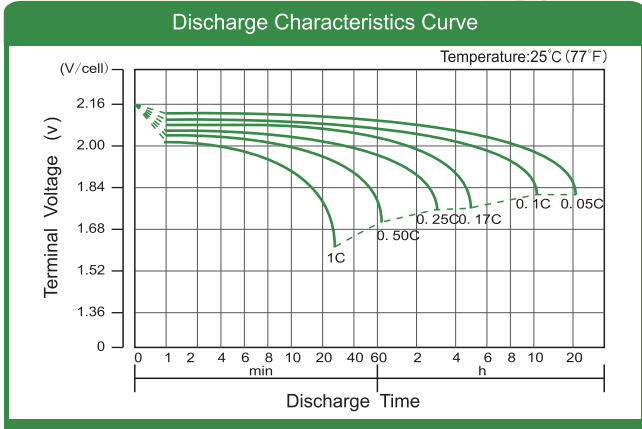
### Constant Current Discharge (Amperes) at 25°C(77°F)

E.V/Time	30min	1h	3h	5h	10h	20h	48h	100h	120h
1.65V	500	337	158	109	61.2	32.3	/	/	/
1.70V	485	328	157	108	60.6	32.2	14.7	/	/
1.75V	473	322	156	107	60.6	32.0	14.6	/	/
1.80V	455	312	151	104	60.0	31.8	14.5	/	/
1.85V	433	296	143	99.0	57.0	30.2	14.2	7.26	6.12

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

E.V/Time	30min	1h	3h	5h	10h	20h	48h	100h	120h
1.65V	935	640	310	215	121	64.8	/	/	/
1.70V	906	624	308	213	121	64.2	29.7	/	/
1.75V	884	611	306	212	120	64.2	29.5	/	/
1.80V	851	593	296	205	119	63.6	29.3	/	/
1.85V	809	563	281	195	113	60.3	28.7	14.6	12.5

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



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