

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

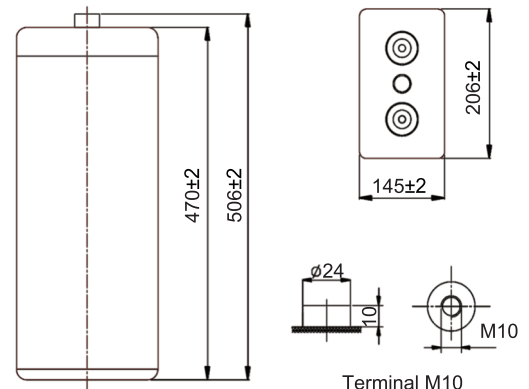
Specifications

Rated Voltage	2V	
Nominal Capacity	420Ah	(C ₁₀ , 1.80V)
Approx Weight	32.0kg±3%(70.55lbs)	
Terminal	F28	
Rated Capacity(25°C)	556.8 Ah	(120hr,4.64A,1.85V)
	508 Ah	(100hr,5.08A,1.85V)
	420 Ah	(10hr,42A,1.80V)
	315 Ah	(3hr,105A,1.80V)
Max.Discharge/Charge Current	2100A(5s) / 105A	
Max.Short Circuit Current	4043A	
Internal Resistance(25°C)	Approx 0.7mΩ	
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 105A. Voltage 2.4V~2.45V at 25°C(77°F)Temp. Coefficient -5mV/°C
	Standby Use	Initial Charging Current less than 105A. 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	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

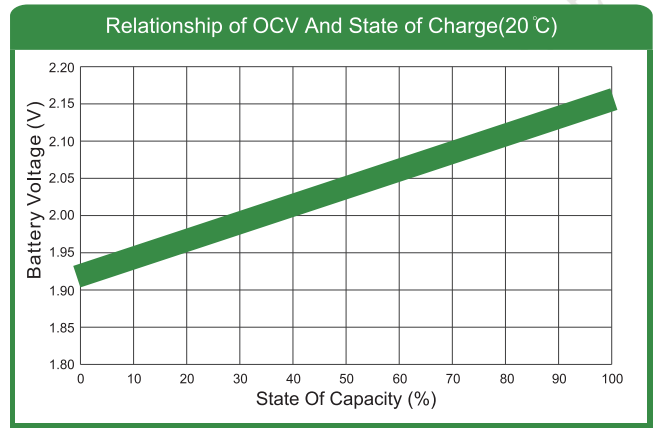
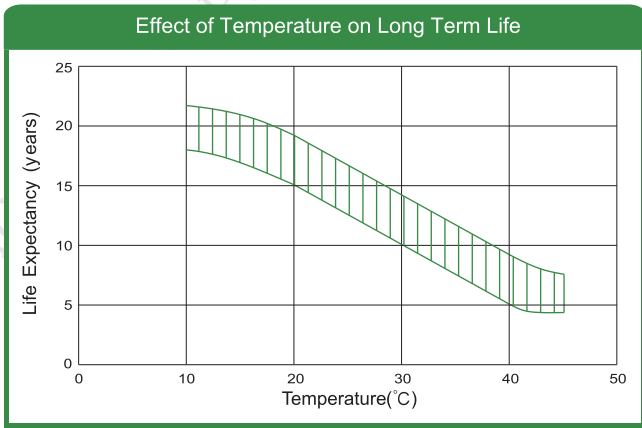
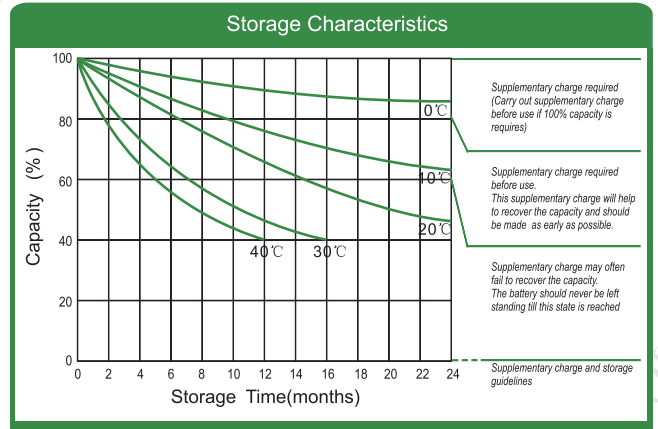
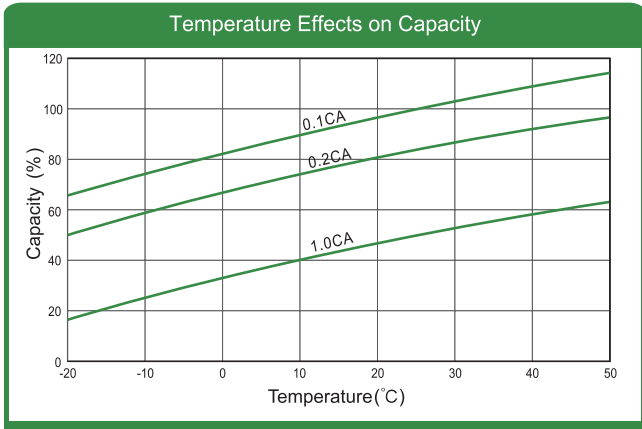
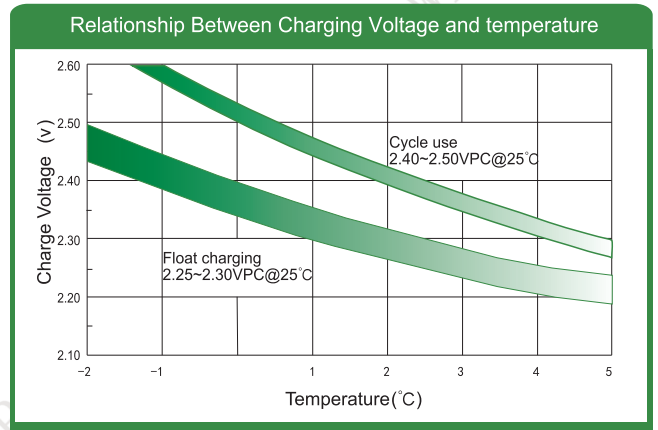
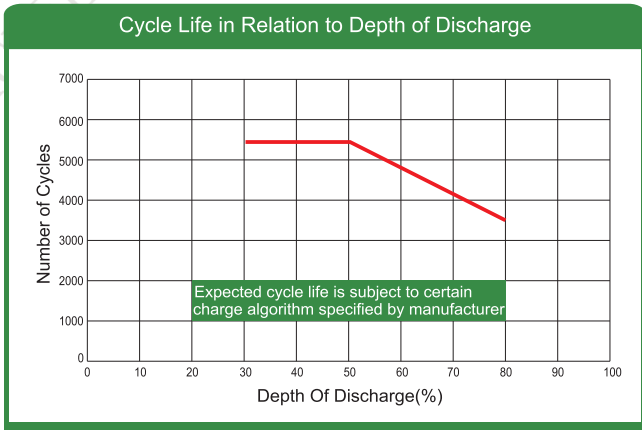
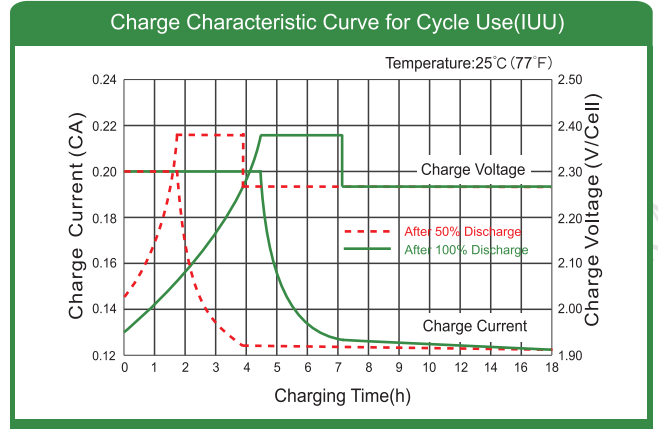
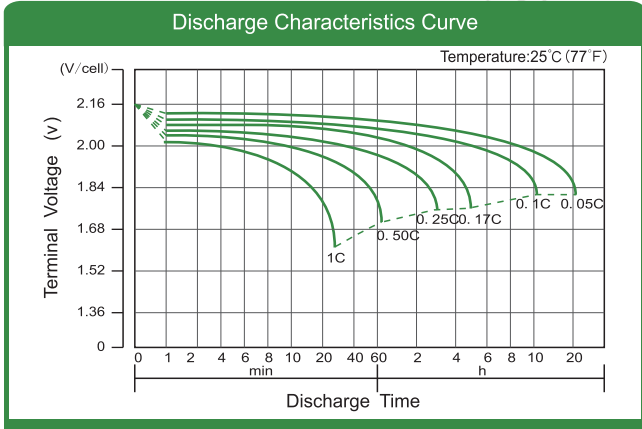
Constant Current Discharge (Amperes) at 25°C(77°F)

E.V/Time	30min	1h	3h	5h	10h	20h	48h	100h	120h
1.65V	395	248	113	79.1	43.8	22.6	11.79	/	/
1.70V	359	233	109	74.1	43.3	22.6	11.7	/	/
1.75V	340	218	107	73.6	42.8	22.4	11.5	/	/
1.80V	321	214	105	70.9	42.0	22.3	11.4	/	/
1.85V	291	205	103	68.7	39.7	21.2	10.9	5.08	4.64

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

E.V/Time	30min	1h	3h	5h	10h	20h	48h	100h	120h
1.65V	836	492	224	158	86.8	45.4	23.6	/	/
1.70V	769	464	218	149	86.3	44.9	23.5	/	/
1.75V	664	434	214	145	85.6	44.9	23.3	/	/
1.80V	624	426	209	140	83.5	44.5	22.8	/	/
1.85V	569	409	204	136	79.1	42.3	21.7	10.20	9.16

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



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