FirstPower Technology Co., Ltd. CFPS2770(2V770Ah)

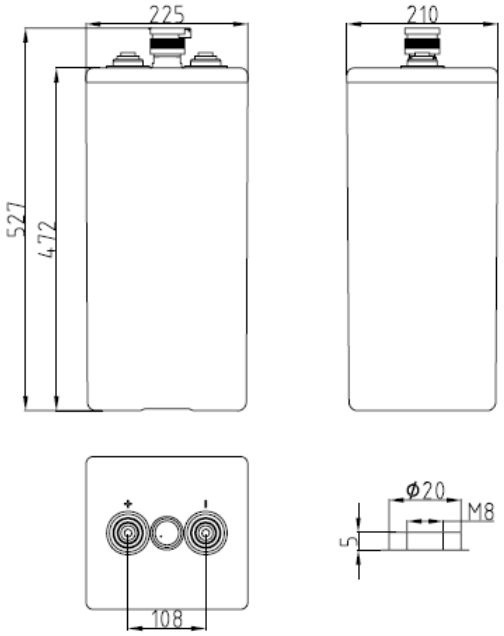
Specifications

Nominal Voltage		2 V
Capacity (20℃)	10HR(1.80V)	770 Ah
	3HR(1.75V)	589Ah
	1HR(1.60V)	431Ah
Battery Weigh	Dry	42.5kg (93.7lbs)±5%
	Wet	58kg (127.9lbs)±5%
Acid Weight (d=1.24kg/l)		Approx.15.5kg (34.2lbs)
Terminal type /material		T10 / Copper
Internal resistance (Fully charged, 25℃)		Approx.0.50mΩ
Self-discharge	1 month	Remaining Capacity: 86%(20℃)
Nominal operating temperature		20℃±5℃(68℉±9℉)
Operating temperature range	Discharge	-15℃～50℃(5℉～122℉)
	Charge	10℃～45℃(50℉～113℉)
	Storage	10℃～30℃(50℉～86℉)
Initial charging	Constant current	Charge the battery at 0.05 C_{10} for 72h.
	Constant voltage	Charge the battery at 0.1 C_{10} to 2.35v/cell; then Charge the battery with 2.35v/cell until the whole charge time up to 100h.
Mark of Fully charged	Constant current	The battery voltage and density of electrolyte remain stable over 2h at the end of charging , and strong bubbles generated within the electrolyte
	Constant voltage	The charging current and density of electrolyte kept constant for more than 3h at the end of the charge; and the charging current is about 0.002~0.005 C10 amp.
Supplementary charge		Charge the battery at 0.05 C_{10} to fully charged.
Equalizing charging		Charge the battery with 2.40v/cell for 48h.
Battery operation	Float charging	Charge the battery with 2.23V (25℃); Equalizing charging the battery when the abnormal occurs
	Charge& discharge	Equalizing charging the battery after discharged and per 3months
	Backup	Supplementary charge the battery per 3 or 6 months.
Maximum charging current		192.5A(0.25C_{10})
Max. discharge current		3850A(5 sec.)
Designed cycle life		1600@80% DOD (30℃)
Designed floating life		20 years(20℃)

CHARACTERISTICS:

- Tubular Positive Plate;
- Flooded Battery;
- Porous Rubber and Porous PVC Separator
- Transparent Container.

Dimensions



CFPS2770

Constant Current Discharge Characteristics (A, 25℃)

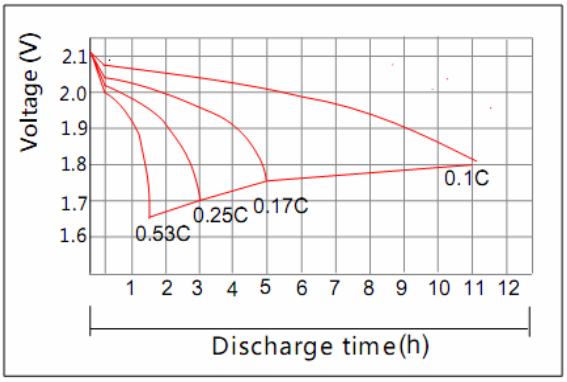
F.V/TIME	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	120h
1.70V	601	416	254	198	159	139	119	90.9	77.8	42.0	36.7	----	----
1.75V	585	404	250	196	158	139	118	90.1	77.8	42.0	36.4	----	----
1.80V	562	393	244	190	153	135	114	87.0	77.0	41.6	36.2	18.6	----
1.85V	531	370	229	179	144	127	107	81.6	73.2	39.7	34.4	18.6	7.70

Constant Power Discharge Characteristics (Watt, 25℃)

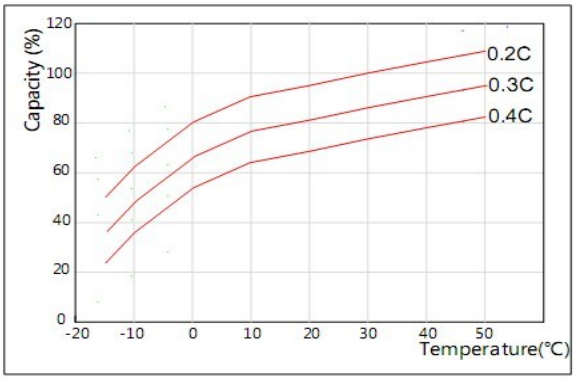
F.V/TIME	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	120h
1.70V	1124	785	489	389	312	275	234	179	156	83.9	73.5	----	----
1.75V	1093	770	481	385	310	273	232	179	154	83.9	73.2	----	----
1.80V	1055	747	470	373	300	265	225	173	153	83.2	72.8	37.7	----
1.85V	986	693	439	347	280	246	209	161	142	77.0	69.3	37.7	15.7

Note: The above characteristics data can be obtained within three charge/discharge cycles.

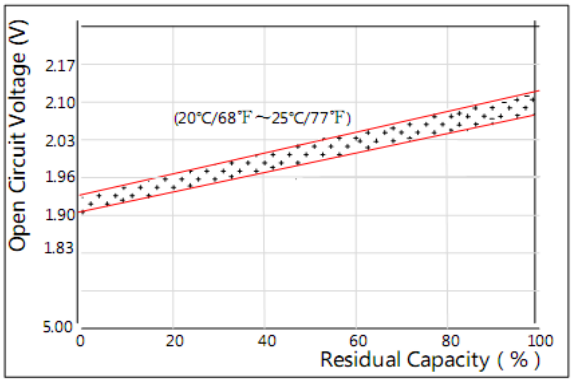
Discharge Characteristics(25℃)



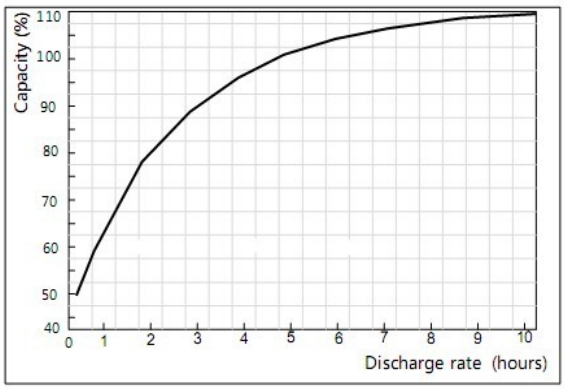
Effect of Temperature on Capacity



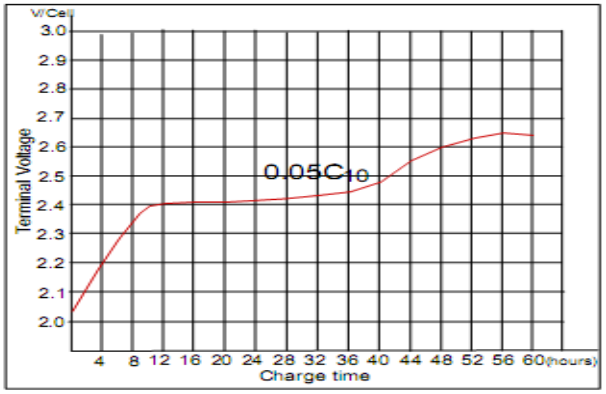
The Relationship for Open Circuit Voltage and Residual Capacity (25℃)



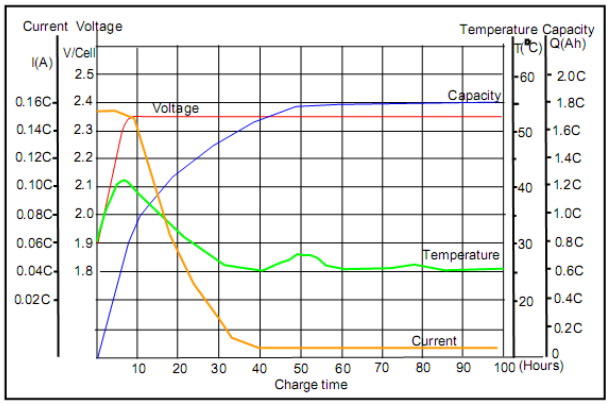
Effect of Discharge rate on Capacity



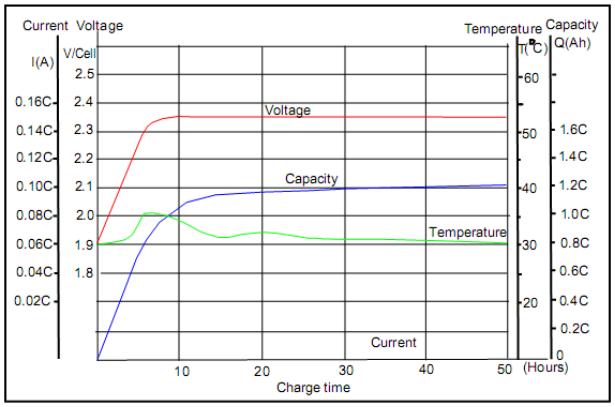
Initial Charging (CC)Characteristics(25℃)



Initial Charging (CV)Characteristics



Supplementary charge (CV) Characteristics



Cycle Life on D.O.D(25℃)