

# CFPS21500(2V1500Ah)

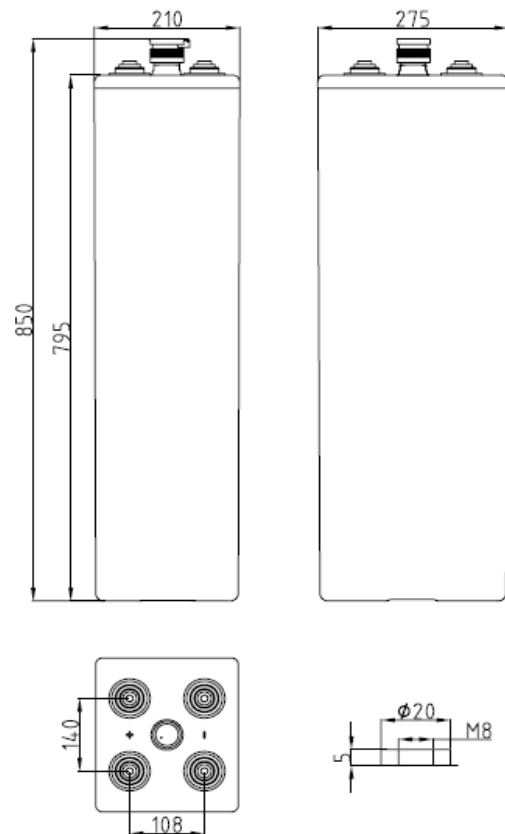
## Specifications

Nominal Voltage		2 V
Capacity (20°C)	10HR(1.80V)	1500 Ah
	3HR(1.75V)	1148Ah
	1HR(1.60V)	840Ah
Battery Weigh	Dry	75kg (165.4lbs) ± 5%
	Wet	105kg (231.5lbs) ± 5%
Acid Weight (d=1.24kg/l)		Approx.30kg (66.2lbs)
Terminal type /material		T10 / Copper
Internal resistance (Fully charged, 25°C)		Approx.0.32mΩ
Self-discharge	1 month	Remaining Capacity: 86%(20°C)
Nominal operating temperature		20°C±5°C (68°F±9°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	10°C ~ 45°C (50°F ~ 113°F)
	Storage	10°C ~ 30°C (50°F ~ 86°F)
Initial charging	Constant current	Charge the battery at 0.05 C <sub>10</sub> for 72h.
	Constant voltage	Charge the battery at 0.1 C <sub>10</sub> 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 C <sub>10</sub> amp.
Supplementary charge		Charge the battery at 0.05 C <sub>10</sub> 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°C); 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		375A(0.25C <sub>10</sub> )
Max. discharge current		7500A(5 sec.)
Designed cycle life		1600@80% DOD (30°C)
Designed floating life		20 years(20°C)

## CHARACTERISTICS:

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

## Dimensions



## Constant Current Discharge Characteristics (A, 25°C)

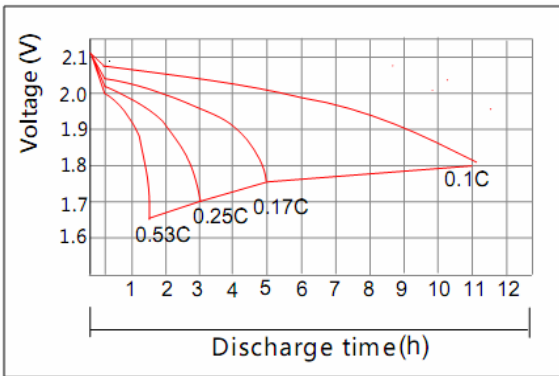
F.V/TIME	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	120h
1.70V	1170	810	495	386	309	272	231	177	152	81.6	71.4	----	----
1.75V	1140	786	488	383	308	270	230	176	152	81.6	70.8	----	----
1.80V	1098	768	476	371	299	263	222	170	150	81.0	70.8	36.2	----
1.85V	1038	720	447	348	281	248	209	159	143	77.4	67.2	36.2	15.0

## Constant Power Discharge Characteristics (Watt, 25°C)

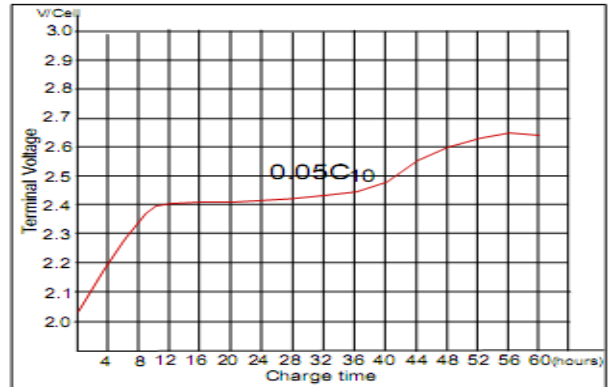
F.V/TIME	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	120h
1.70V	2184	1530	954	756	606	536	456	350	303	164	143	----	----
1.75V	2130	1500	936	750	606	533	452	348	300	164	143	----	----
1.80V	2058	1458	918	726	585	516	438	338	299	162	142	73.2	----
1.85V	1914	1350	858	678	545	480	408	314	278	150	135	73.2	30.6

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

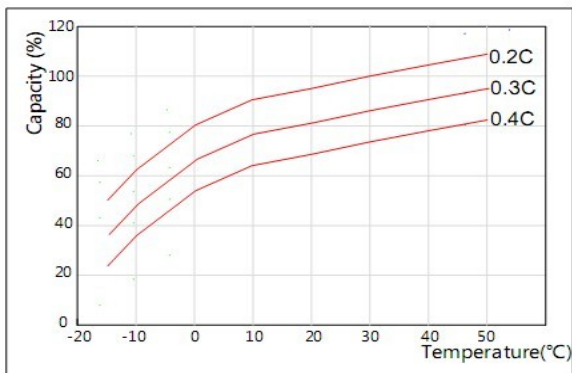
Discharge Characteristics(25°C)



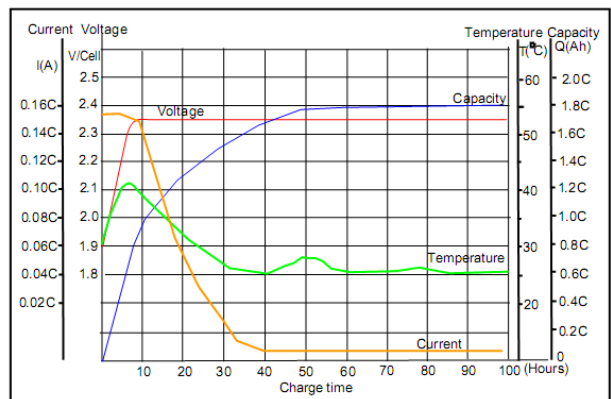
Initial Charging (CC) Characteristics(25°C)



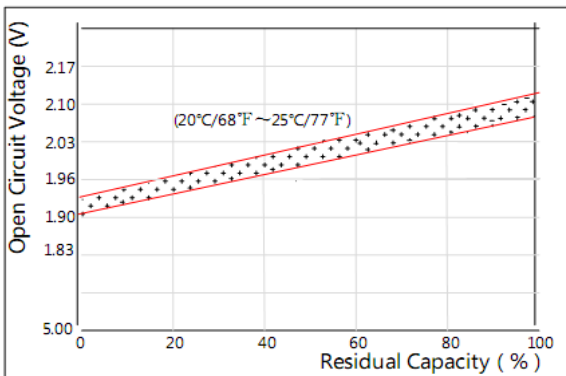
Effect of Temperature on Capacity



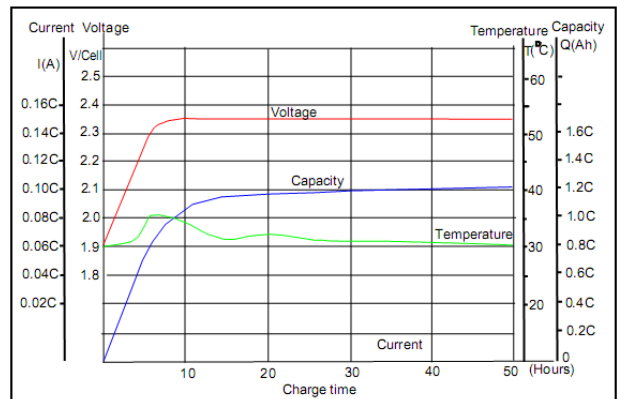
Initial Charging (CV) Characteristics



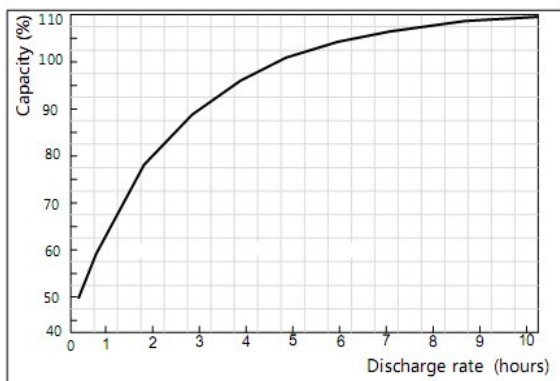
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



Supplementary charge (CV) Characteristics



Effect of Discharge rate on Capacity



Cycle Life on D.O.D(25°C)

