



# FUJIAN YAHENG POWER TECHNOLOGY GROUP CO.,LTD



## 6GFM120H 12V120AH

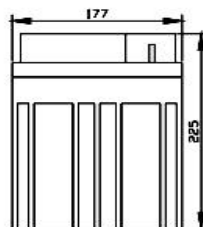
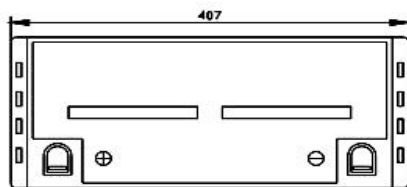
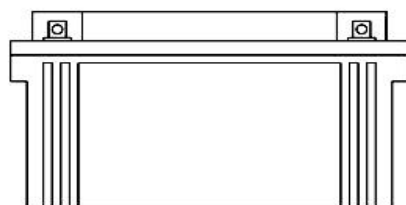
6GFM120H is a high rate discharge battery. It is specially designed for applications where need high power output. By optimum design of battery grids and plate formula, the battery can deliver up to 40% more power than the standard range. Suitable for UPS/EPS where high current loads is required.

### Specification

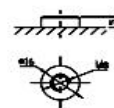
Cells Per Unit	6
Voltage Per Unit	12V
Capacity	560W@10min-rate to 1.6V per cell @ 25°C
Weight	Approx. 38kg (Tolerance±3%)
Max. Discharge Current	1200A(5sec)
Internal Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25±5°C
Float Charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging	36.0A Current Limit
Equalization and Cycle service	14.6 to 14.8 VDC /unit Average at 25°C
Self Discharge	YAHENG Vale Regulated Lead Acid(VRLA) Can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using
Terminal	Terminal F12/L20
Container Material	A.B.S. UL94-HB, Flammability resistance of UL94-V2 can be avail upon request

### Dimensions

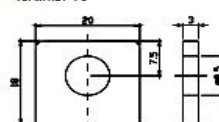
Unit: mm Dimension: 407(L)×177(W)×225(H)



Terminal F12



Terminal F5



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

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	365.5	266.8	217.7	135.2	78.00	46.67	32.26	26.44	21.64	14.91	12.60	6.93
10.0V	355.0	253.8	213.2	133.0	77.64	46.32	32.14	26.32	21.51	14.78	12.48	6.81
10.2V	344.5	244.9	209.9	131.8	76.92	45.97	31.89	26.19	21.39	14.66	12.36	6.68
10.5V	309.3	226.0	199.8	128.5	76.20	45.62	31.77	25.95	21.13	14.54	12.24	6.55
10.8V	279.2	206.1	184.2	122.9	74.40	44.80	30.90	25.34	20.75	14.30	12.12	6.43
11.1V	238.4	184.2	165.2	115.1	70.68	42.81	29.54	24.11	19.86	13.69	11.76	6.05

### Constant Power Discharge Characteristics: W(25°C)

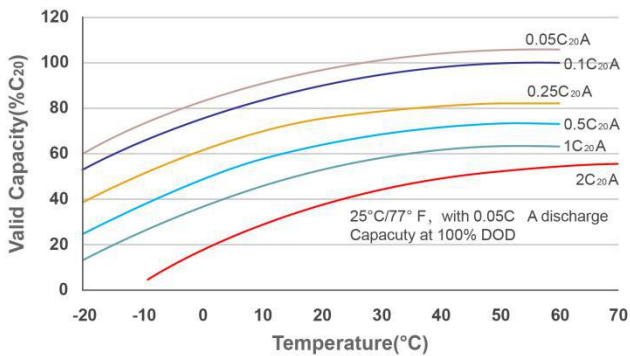
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	4477	3443	2993	1927	1127	687.6	479.9	393.9	322.7	222.5	188.3	103.9
10.0V	4389	3337	2945	1903	1124	684.0	480.0	393.4	321.9	221.4	187.1	102.1
10.2V	4339	3249	2912	1890	1115	679.9	477.9	392.6	320.8	220.0	185.4	100.2
10.5V	3950	3026	2778	1846	1105	674.9	476.1	388.9	317.0	218.1	183.6	98.31
10.8V	3598	2789	2567	1769	1085	666.3	163.1	380.1	311.2	214.5	181.8	96.42
11.1V	3160	2522	2311	1662	1038	641.6	443.1	361.7	297.9	205.4	176.3	90.75

All mentioned values are average values.

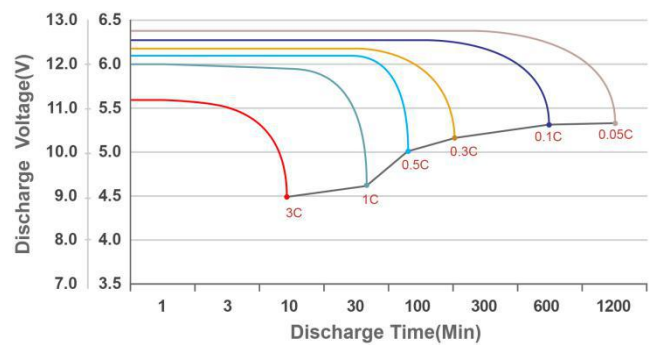


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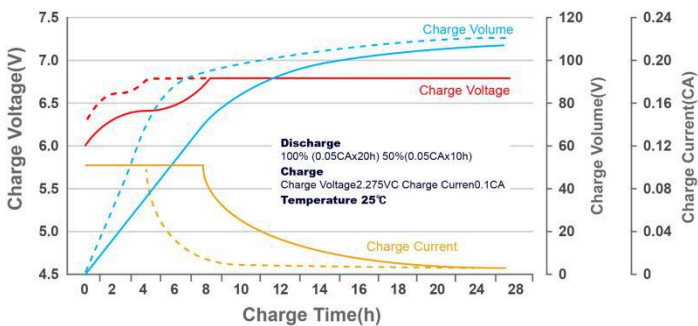
## Temperature and Valid Capacity



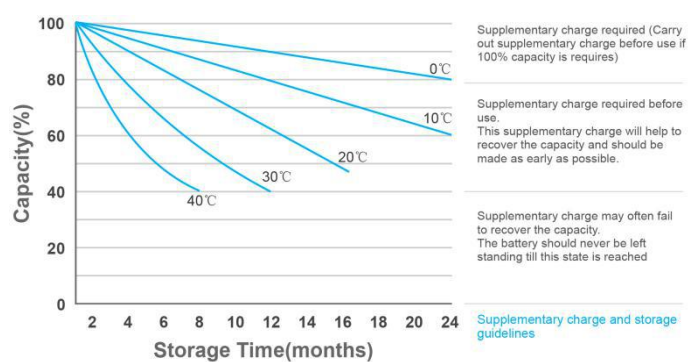
## Discharge Characteristics at Various Rates @25°C/77



## Charge characteristic curve for standby use



## Storage characteristic



## Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.75V	1.60V
Discharge Current (A)	$A \leq 0.2C$	$0.2C \leq A \leq 1.0C$	$\geq 1.0C$

Charge the batteries at least once every six months, if they are stored at 25°C

Charging Method:

Constant Voltage	$-0.2C \times 2h + 2.4 - 2.45V/cell \times 24h$ , Max. Current 0.3CA
Constant Current	$-0.2C \times 2h + 0.1CA \times 12h$
Fast	$-0.2C \times 2h + 0.3CA \times 4.0h$

## Maintenance & Cautions

### Float Service

- ✘ Every month, recommend inspection every battery voltage
  - ✘ Every three months, recommend equalization charge for one time.
- Equalization charge method:
- Discharge: 100% rate capacity discharge.
- Charge: Max. Current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h
- ✘ Effect of temperature on float charge voltage: -3mV/Cell.
  - ✘ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.

## Contact us:

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