

# CHR120-12

12V 120AH

High Rate Battery



## CHR120-12



## Physical Specification

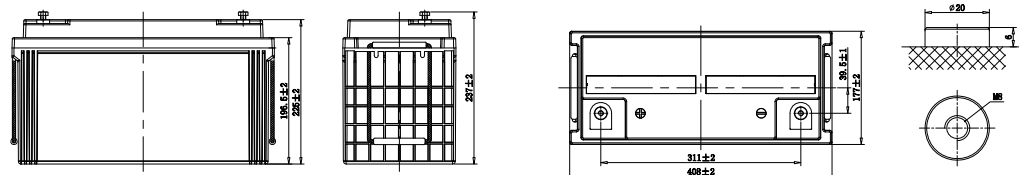
Part Number:	<b>CHR120-12</b>
Length:	<b>408±1mm (16.06 inches)</b>
Width:	<b>177±1mm ( 6.97 inches)</b>
Container Height:	<b>225±1mm (8.85 inches)</b>
Total Height (with terminal):	<b>225±1mm (8.85 inches)</b>
Approx Weight:	<b>37.3 Kg (82.2 lbs)</b>

## Specifications

	Nominal Voltage	12V	
	Nominal Rate (W ,1.67V/cell)	460W	
	Nominal Capacity (C10,1.80V/cell)	120Ah	
	Technology	High Rate Discharge	
	Terminal Type	M8	
<b>Container Material</b>	Flame Retardant (FR)	ABS (UL94:VO)	
<b>Rated Capacity (25°C)</b>	(10hr, 12.0A,1.80V/cell)	120.0 Ah	
	(8hr, 13.9A,1.80V/cell)	111.2 Ah	
	(5hr, 21.1A,1.75V/cell)	105.5 Ah	
	(3hr, 32.0A,1.75V/cell)	96.0 Ah	
	(1hr,77.4A,1.67V/cell)	77.4 Ah	
<b>Max Currents (5s)</b>	1200A		
<b>Internal Resistance</b>	Approx. 3.6mΩ		
<b>Discharge Characteristics</b>	Operating Temp. Range	Discharge: -20°C~55°C (-4°F~131°F)	
		Charge: 0°C~40°C (32°F~104°F)	
		Storage: -15°C~50°C (5°F~122°F)	
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
	Max.Charging Current(25°C)	30.0A	
	Charge voltage(25°C)	Float	13.5V
		Temp. Coefficient	-3m V/cell/ C
		Equalization	14 .1~14.4V
	Effect of temperature on Capacity	40°C (104°F)	106%
		25°C (77°F)	100%
0°C (32°F)		86%	
<b>Design Floating Life at 20°C</b>	20+ Years		
<b>Self Discharge</b>	Canbat High Rate batteries may be stored for up to 6 months at 25°C (77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter. Self-discharge is less than 2%		

## Dimensions

### M8 Terminal



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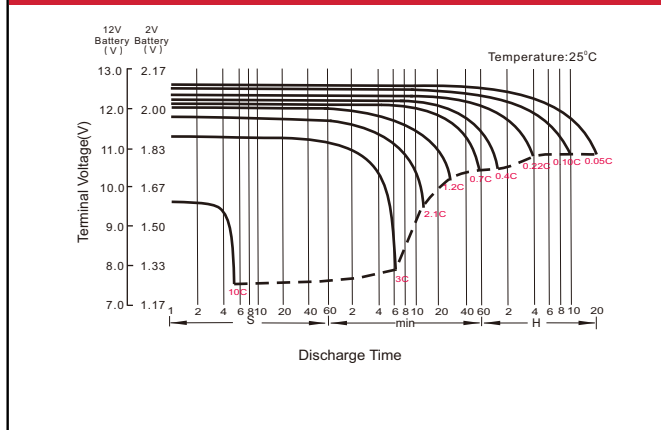
### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	275.2	219.7	190.5	149.8	105.7	84.7	66.4	49.3	39.7	29.5	23.4	19.8	13.7	11.7
1.80V/cell	312.9	249.4	215.8	169.3	119.2	89.7	70.7	52.4	42.0	30.9	24.2	20.5	13.9	12.0
1.75V/cell	339.9	270.4	233.7	182.8	128.2	93.3	73.5	54.4	43.6	32.0	25.0	21.1	14.1	12.1
1.70V/cell	363.4	288.3	248.2	193.9	135.9	96.3	75.4	55.8	44.6	32.7	25.6	21.6	14.3	12.1
1.67V/cell	376.1	297.5	255.4	199.1	139.1	98.9	77.4	57.2	45.7	33.3	26.0	21.9	14.5	12.3
1.60V/cell	389.4	307.6	263.3	204.3	142.5	100.7	78.8	58.3	46.6	34.2	26.6	22.3	14.5	12.4

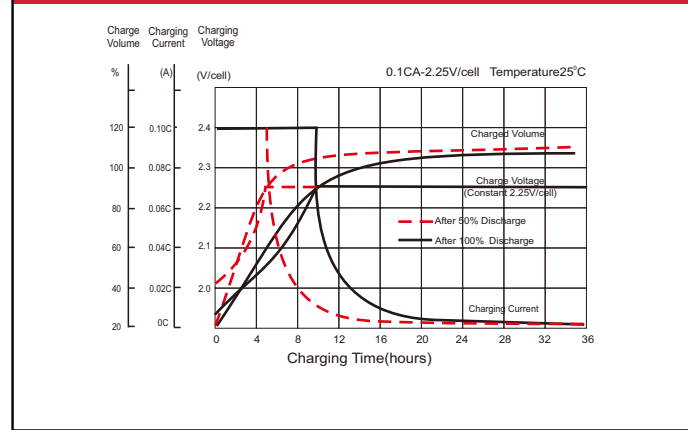
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	513.9	413.3	360.6	284.9	202.0	162.8	128.4	95.6	77.2	57.7	45.8	38.9	27.1	23.2
1.80V/cell	574.9	462.3	403.4	318.7	225.9	171.4	135.9	101.0	81.3	60.1	47.3	40.3	27.6	23.8
1.75V/cell	613.5	493.4	430.6	340.1	241.1	177.3	140.7	104.5	84.1	62.0	48.8	41.3	27.8	23.9
1.70V/cell	645.0	518.7	452.6	357.6	253.5	181.6	143.6	106.6	85.7	63.1	49.7	42.1	28.2	24.0
1.67V/cell	655.5	527.2	460.0	363.4	257.6	185.5	146.6	108.8	87.4	64.2	50.2	42.5	28.4	24.4
1.60V/cell	664.7	534.5	466.4	368.5	261.2	187.0	148.2	110.0	88.6	65.4	51.1	43.2	28.5	24.5

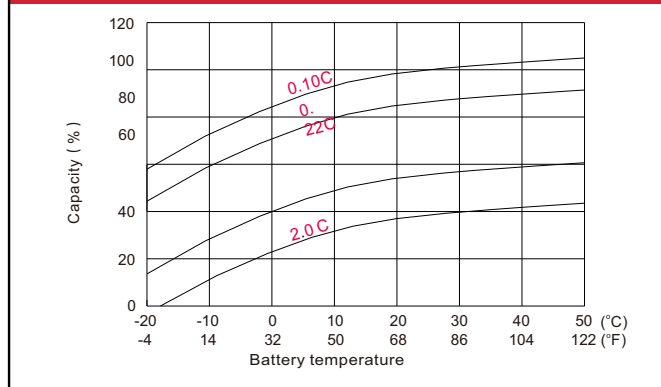
### Discharge Characteristics



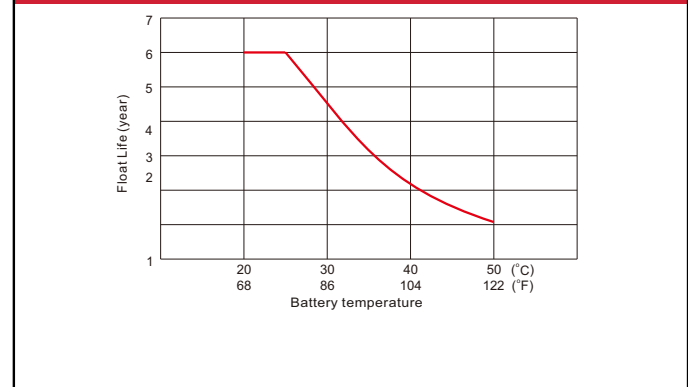
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Temperature Effects on Long Term Float Life



### High Rate Batteries

The most important asset for many businesses is data. Whether it's customer data, employee data or financial data, no business can afford to lose it. Unfortunately, unexpected power interruptions may lead to a loss of data, which could potentially cost thousands of dollars. To solve this issue, Canbat has developed the highest performing high rate batteries, which are specially designed for back-up power systems. Our batteries have a proven track record to be the most reliable in the industry, backed up with the best warranty in Canada. In the event of a power outage, UPS systems provide back-up power to your equipment. The most important component in any UPS is the battery. Whether the UPS is hooked up to your personal computer at home, or to your equipment at work, Canbat offers top-performing batteries you can count on. If you don't have high performing batteries in your UPS during a power outage, you are putting yourself at risk of losing data. A power surge or blackout could erase hours of hard work and damage your equipment.

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