

# CHR 120-12

12V 120AH

High Rated



## CHR120-12

Awaiting Image

## Physical Specification

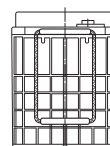
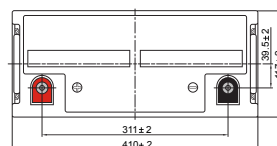
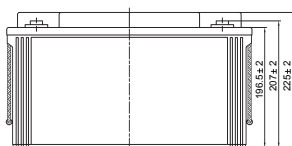
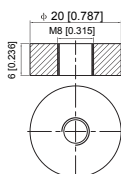
Part Number:	<b>CHR 120-12</b>
Length:	<b>408 ± 2 mm (16.1 inches)</b>
Width:	<b>177 ± 2 mm (6.97 inches)</b>
Container Height:	<b>225 ± 2 mm (8.86 inches)</b>
Total Height (with terminal):	<b>225 ± 2 mm (8.86 inches)</b>
Approx Weight:	<b>Approx 37.6 kg (82.9 lbs)</b>

## Specifications

	Normal Voltage	12V
	Normal Capacity (20HR)	120AH
Terminal Type	Standard Terminal	T11
	Optional Terminal	-
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS(UL94:VO)
Rated Capacity	124.0 AH/12.4A	(10hr, 1.80V/cell, 25°C / 77°F)
	120.0 AH/15.0A	(8hr, 1.80V/cell, 25°C / 77°F)
	105.0 AH/21.0A	(5hr, 1.75V/cell, 25°C / 77°F)
	93.9 AH/31.3A	(3hr, 1.75V/cell, 25°C / 77°F)
	85.3 AH/85.3A	(1hr, 1.60V/cell, 25°C / 77°F)
Max Discharge Current	1300A (5s)	
Internal Resistance	Approx 4mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)
		Charge: 0 ~ 40°C (32 ~ 104°F)
		Storage: -15 ~ 40°C (5 ~ 104°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 36.0A.Voltage 14.4V ~ 15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5V ~ 13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40°C (104°F) 103%	
	25°C (77°F) 100%	
	0°C (32°F) 86%	
Design Floating Life at 20°C	12+ Years	
Self Discharge	Canbat 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.	

## Dimensions

### T11 Terminal



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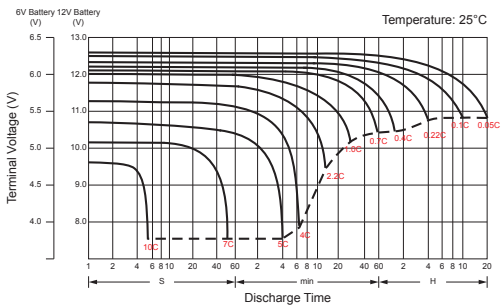
### Constant Power Discharge Characteristics at 25°C / 77°F, Unit: A

F.V (V/Cell)	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	250.6	205.2	182.4	156.2	118.1	88.0	69.6	39.8	29.0	23.3	19.6	17.1	14.4	11.9	6.22
1.80V/cell	315.4	242.6	207.8	175.3	129.6	94.4	74.4	42.0	30.5	24.4	20.4	17.8	15.0	12.4	6.47
1.75V/cell	361.4	271.4	229.9	189.4	136.1	97.6	77.4	43.4	31.3	24.9	21.0	18.3	15.2	12.5	6.53
1.70V/cell	393.1	295.9	244.8	199.4	142.6	101.6	80.3	44.8	32.2	25.5	21.5	18.7	15.4	12.6	6.60
1.67V/cell	427.7	315.4	263.0	209.2	148.1	105.3	83.3	46.2	33.1	26.3	22.0	19.1	15.6	12.8	6.66
1.60V/cell	466.6	335.5	271.7	216.7	152.9	108.0	85.3	47.5	33.8	26.8	22.4	19.6	15.8	12.9	6.74

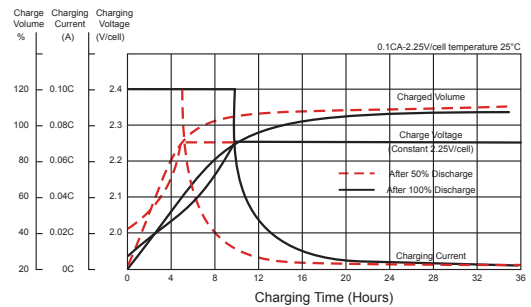
### Constant Current Discharge Characteristics at 25°C / 77°F, Unit: W

F.V (V/Cell)	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	470.0	388.8	348.9	301.2	229.2	171.7	136.4	78.5	57.3	46.3	39.1	34.1	28.9	23.9	12.5
1.80V/cell	586.2	456.4	395.0	336.1	250.4	183.4	145.4	82.5	60.2	48.3	40.5	35.5	29.9	24.8	13.0
1.75V/cell	665.7	506.8	434.3	361.3	261.8	189.1	150.9	84.9	61.4	49.0	41.4	36.3	30.1	24.8	13.0
1.70V/cell	713.7	545.2	457.0	376.5	271.7	195.2	155.2	86.9	62.7	49.9	42.2	36.8	30.3	25.0	13.1
1.67V/cell	763.7	572.1	483.8	389.9	279.1	200.3	159.5	88.9	64.0	51.0	42.8	37.3	30.4	25.0	13.1
1.60V/cell	813.4	595.7	490.1	396.1	282.8	202.0	160.9	90.0	64.5	51.3	43.1	37.7	30.5	25.0	13.1

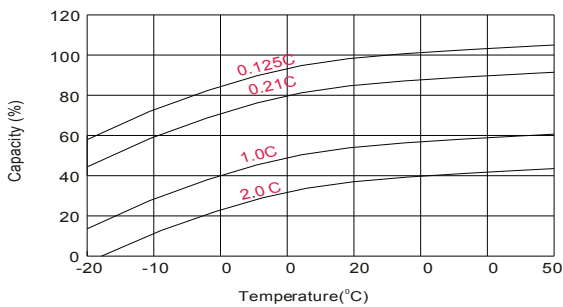
### Discharge Characteristics



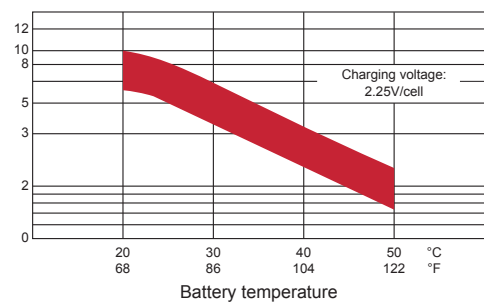
### Float Charging Characteristics



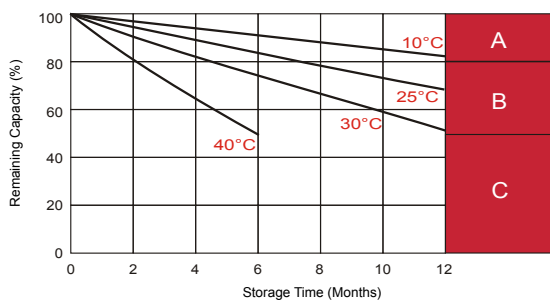
### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



### Self Discharge Characteristics



- A** No supplementary charge required  
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:  
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
3. Charged for 8~10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.

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