

# UCG 120-12

12V 120AH

Deep Cycle Gel

# Ultracell®

'Quality in Every Language'

## UCG120-12



## Physical Specification

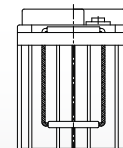
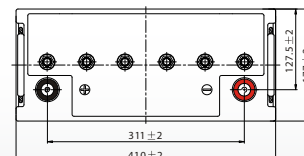
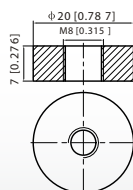
Part Number:	<b>UCG120-12</b>
Length:	<b>410 ± 2 mm (16.14 inches)</b>
Width:	<b>177 ± 2 mm (6.97 inches)</b>
Container Height:	<b>225 ± 2 mm (8.86 inches)</b>
Total Height (with terminal):	<b>225 ± 2 mm (8.86 inches)</b>
Approx Weight:	<b>Approx 37.60 kg</b>

## Specifications

	Nominal Voltage	12V	
	Nominal Capacity (20HR)	120AH	
Terminal Type	Standard Terminal	F11	
	Optional Terminal	-	
Container Material	Standard Option	ABS	
	Flame Retardant Option (FR)	ABS (UL94:VO)	
Rated Capacity	120.0 AH/6.5A	(20hr, 1.80V/cell, 25°C / 77°F)	
	121.0 AH/12.1A	(10hr, 1.80V/cell, 25°C / 77°F)	
	104.0 AH/20.8A	(5hr, 1.75V/cell, 25°C / 77°F)	
	90.6 AH/30.2A	(3hr, 1.75V/cell, 25°C / 77°F)	
	71.5 AH/71.5A	(1hr, 1.60V/cell, 25°C / 77°F)	
Max Discharge Current	1170A (5s)		
Internal Resistance	Approx 4.8mΩ		
Discharge Characteristics	Operating Temp. Range	Discharge: -20 ~ 55°C (-4 ~ 131°F)	
		Charge: 0 ~ 40°C (32 ~ 104°F)	
		Storage: -20 ~ 50°C (-4 ~ 122°F)	
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
	Cycle Use	Initial Charging Current less than 31.25A. 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	15 Years		
Self Discharge	Ultracell 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

### F11 Terminal



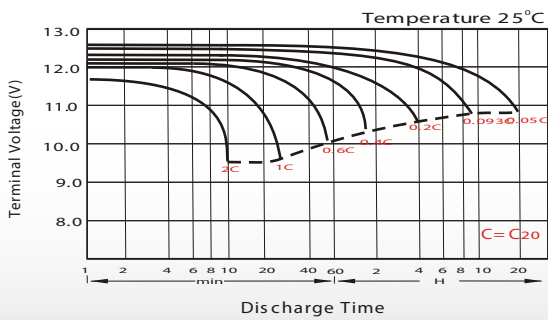
## Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	110.0	86.3	65.9	55.1	35.0	26.7	22.1	19.1	16.4	14.6	13.1	12.0	11.3	6.24
1.80V/cell	126.0	96.5	72.6	60.8	37.8	28.6	23.4	20.0	17.3	15.2	13.8	12.6	11.9	6.50
1.75V/cell	141.6	106.1	78.5	65.1	40.1	30.2	24.5	20.8	17.9	15.8	14.2	13.0	12.1	6.63
1.70V/cell	152.5	113.6	83.4	68.9	42.5	31.4	25.3	21.5	18.5	16.3	14.6	13.3	12.4	6.71
1.67V/cell	158.7	118.0	86.3	71.5	43.6	32.4	25.9	21.9	18.8	16.5	14.9	13.5	12.5	6.78
1.60V/cell	172.0	126.4	92.7	75.9	45.4	33.7	26.9	22.6	19.3	16.9	15.1	13.8	12.8	6.88

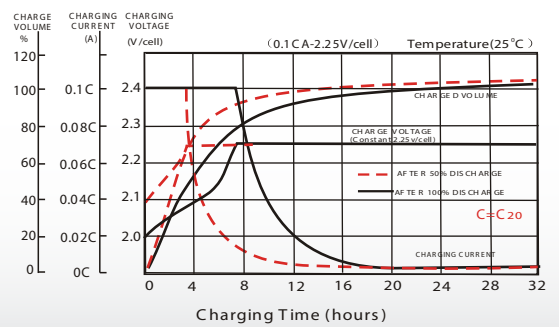
## Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	210.5	166.3	127.7	107.3	68.3	52.2	43.4	37.6	32.6	28.9	26.1	23.9	22.6	12.5
1.80V/cell	238.0	184.1	139.8	117.8	73.6	55.7	45.8	39.4	34.1	30.2	27.3	25.1	23.6	13.0
1.75V/cell	264.5	200.7	150.1	125.5	77.8	58.8	47.9	40.8	35.2	31.2	28.1	25.8	24.0	13.2
1.70V/cell	281.8	213.0	158.2	132.0	82.0	61.0	49.3	41.9	36.3	32.1	28.9	26.5	24.6	13.4
1.67V/cell	290.0	219.0	162.7	136.2	83.7	62.7	50.4	42.7	36.8	32.5	29.3	26.7	24.8	13.5
1.60V/cell	310.8	232.2	173.4	143.9	86.7	64.9	52.1	43.9	37.6	33.1	29.7	27.3	25.3	13.6

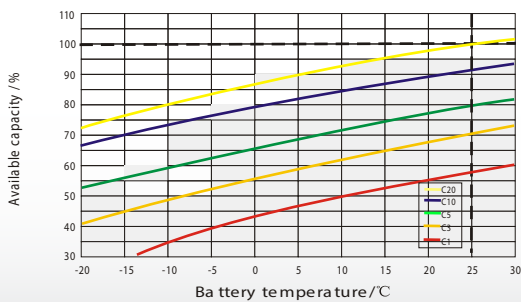
### Discharge Characteristics



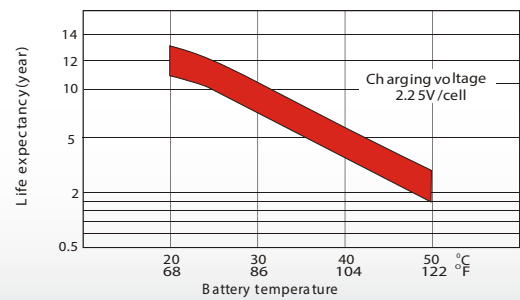
### Float Charging Characteristics



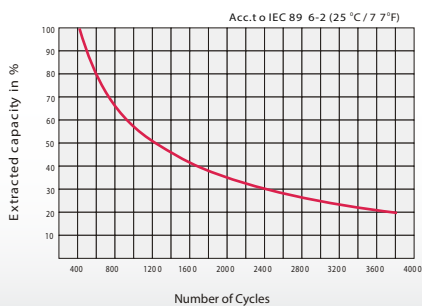
### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS. Storage Time

