

# UCG 320-12

12V 316AH

Deep Cycle

# Ultracell®

'Quality in Every Language'

## UCG320-12



## Physical Specification

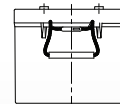
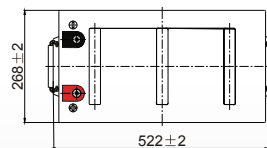
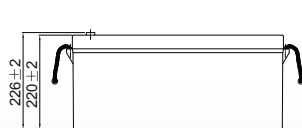
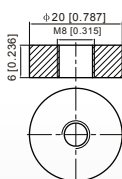
Part Number:	<b>UCG320-12</b>
Length:	<b>522 ± 2 mm</b>
Width:	<b>268 ± 2 mm</b>
Container Height:	<b>220 ± 2 mm</b>
Total Height (with terminal):	<b>226 ± 2 mm</b>
Approx Weight:	<b>Approx 73kg</b>

## Specifications

	Normal Voltage	12V
	Normal Capacity (100HR)	316.0AH
Terminal Type	Standard Terminal	F11
	Optional Terminal	-
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS(UL94:VO)
Rated Capacity	286.0 AH/25.8A	(10hr, 1.80V/cell, 25°C / 77°F)
	275.0 AH/31.3A	(8hr, 1.80V/cell, 25°C / 77°F)
	218.0 AH/43.6A	(5hr, 1.75V/cell, 25°C / 77°F)
	198.0 AH/66.0A	(3hr, 1.75V/cell, 25°C / 77°F)
	165.5 AH/165.5A	(1hr, 1.60V/cell, 25°C / 77°F)
Max Discharge Current	2500A (5s)	
Internal Resistance	Approx 2.5mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)
		Charge: 0 ~ 40°C (5 ~ 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 75.0A 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	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



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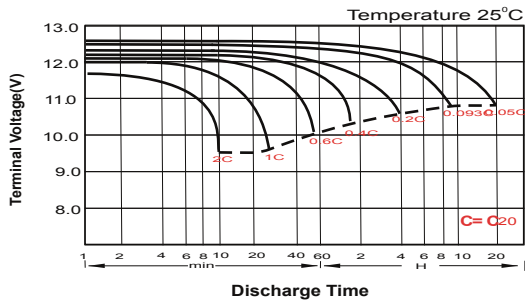
### Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	363.0	335.0	288.0	222.5	168.3	137.0	83.4	60.8	48.1	40.2	35.7	29.9	25.0	12.9
1.80V/cell	409.5	374.0	317.3	237.5	180.7	147.8	88.9	64.6	50.7	42.5	37.7	31.3	25.8	13.4
1.75V/cell	444.0	392.7	330.8	246.5	186.7	153.5	91.1	66.0	52.3	43.6	38.4	31.6	26.1	13.5
1.70V/cell	469.5	419.2	348.0	253.0	192.3	158.0	92.8	67.6	53.4	44.4	39.1	31.8	26.5	13.6
1.67V/cell	\	442.1	360.8	262.5	197.0	162.0	94.6	68.4	54.3	45.2	39.7	32.2	26.7	13.7
1.60V/cell	\	461.0	371.3	267.5	200.3	165.5	96.3	69.8	55.4	45.8	40.1	32.5	26.9	13.8

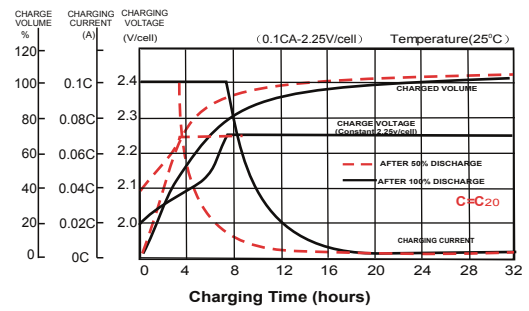
### Constant Power Discharge (Watts) at 25°C (77°F)

F.V/Time	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	670.5	625.1	542.9	424.1	325.2	267.5	165.9	121.5	96.4	80.9	72.0	60.4	50.7	26.2
1.80V/cell	747.5	688.5	589.2	445.7	346.5	287.2	176.3	128.6	101.3	85.2	75.6	63.0	52.0	27.0
1.75V/cell	797.5	714.0	608.4	458.8	356.7	297.6	180.2	130.9	104.0	87.0	76.9	63.5	52.4	27.1
1.70V/cell	824.2	751.7	635.3	468.3	367.0	305.4	182.9	133.7	105.9	88.4	78.0	63.7	53.0	27.3
1.67V/cell	\	783.3	653.7	481.9	372.7	311.9	185.9	135.1	107.6	89.7	79.0	64.3	53.4	27.5
1.60V/cell	\	806.7	665.4	487.7	374.6	316.1	188.4	137.3	109.3	90.6	79.7	64.7	53.7	27.6

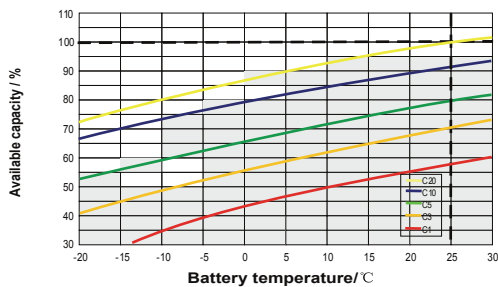
### Discharge Characteristics



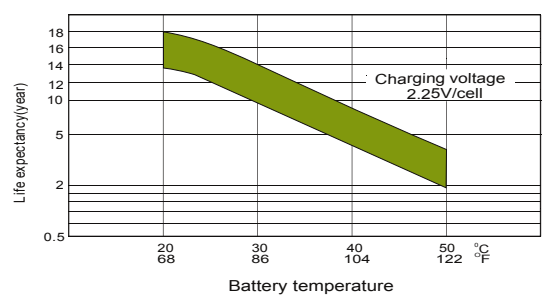
### Charging Characteristics



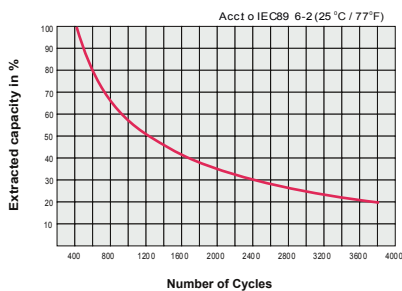
### Temperature Effects in Relation to Battery Capacity



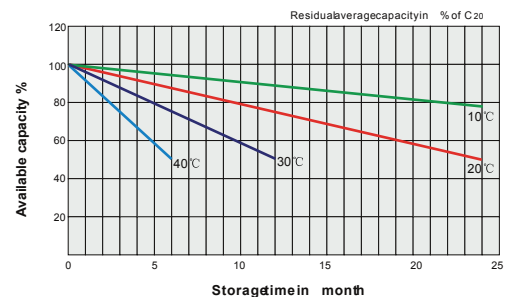
### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS. Storage Time



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