

# UCG22-12

12V 22AH  
Deep Cycle Gel

# Ultracell®

Quality in Every Language

## UCG22-12



## Physical Specification

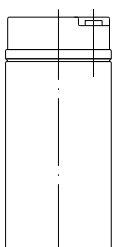
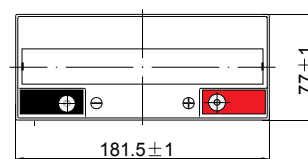
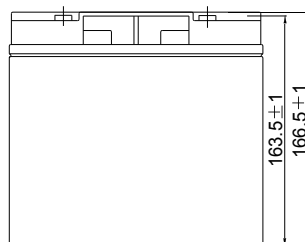
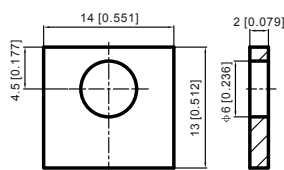
Part Number	UCG22-12
Length	181.5 ± 2 mm
Width	77 ± 2 mm
Container Height	168.0 ± 2 mm
Total Height (with terminal)	168.0 ± 2 mm
Approx Weight	6.20 kg

## Specifications

	Nominal Voltage	12V
	Nominal Capacity (10HR)	22AH
<b>Terminal Type</b>	Standard Terminal	F3
<b>Container Material</b>	Standard Option	ABS
<b>Rated Capacity</b>	20hr, 1.80V/cell, 25°C	22.85AH/1.1AH
	10hr, 1.80V/cell, 25°C	22AH/2.06A
	5hr, 1.75V/cell, 25°C	18.0AH/3.6A
	3hr, 1.75V/cell, 25°C	16.32AH/5.44A
	1hr, 1.60V/cell, 25°C	13.3AH/13.3A
<b>Max Discharge Current</b>	300A (5s)	
<b>Internal Resistance</b>	Approx 15.0mΩ	
<b>Discharge Characteristics</b>	Operating Temp. Range	Discharge: -15 ~ 50°C
		Charge: 0 ~ 40°C
		Storage: -15 ~ 40°C
	Nominal Operating Temp. Range	25 ± 3°C
	Cycle Use	Initial Charging Current less than 6.0A. Voltage 14.4 ~ 15.0 Temp. Coefficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5 ~ 13.8 Temp. Coefficient -20mV/°C
	Capacity affect by Temperature	40°C 103%
		25°C 100%
		0°C 86%
<b>Design Floating Life at 20°C</b>	12 Years	
<b>Self Discharge</b>	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

### F3 Terminal



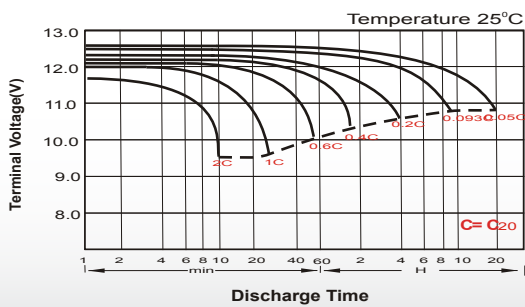
## Constant Current Discharge (Amperes) at 25°C

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	30.1	25.3	22.1	15.9	12.64	10.3	6.4	5	4.03	3.26	2.85	2.33	1.94	1.09
1.80V/cell	38.4	30.6	26.2	18.8	14.7	11.5	6.95	5.35	4.3	3.51	3.06	2.46	2.06	1.1
1.75V/cell	42.3	33.41	28.16	19.53	15.3	12.02	7.22	5.44	4.4	3.6	3.14	2.52	2.07	1.11
1.70V/cell	46.05	35.7	29.6	20.35	15.8	12.44	7.5	5.6	4.51	3.7	3.2	2.55	2.1	1.13
1.67V/cell	49.75	37.9	31.45	21.4	16.24	12.85	7.71	5.83	4.66	3.8	3.28	2.59	2.14	1.14
1.60V/cell	54	40.6	33.5	22.62	17	13.3	8	6	4.81	3.92	3.35	2.61	2.16	1.15

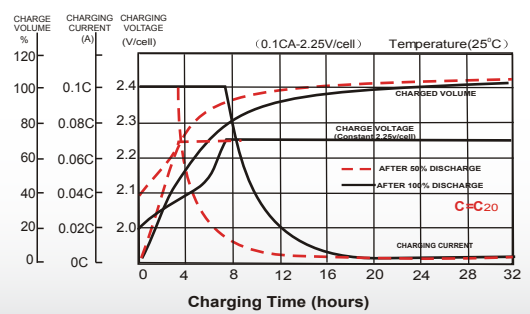
## Constant Power Discharge (Watts) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	546	465	410	298	238	194	12.1	9.45	7.67	6.25	5.49	4.48	3.74	2.13
1.80V/cell	689	553	478	347	275	216	13.1	10.1	8.15	6.69	5.86	4.75	3.96	2.14
1.75V/cell	748	598	510	359	284	225	13.6	10.3	8.32	6.86	6.01	4.83	4.00	2.16
1.70V/cell	803	634	533	372	294	231	14.1	10.5	8.52	7.01	6.13	4.89	4.03	2.20
1.65V/cell	86.1	670	563	390	300	238	14.4	110	8.79	7.20	6.26	4.96	4.11	2.22
1.60V/cell	919	708	594	408	310	245	14.8	112	9.03	7.40	6.38	5.00	4.15	2.23

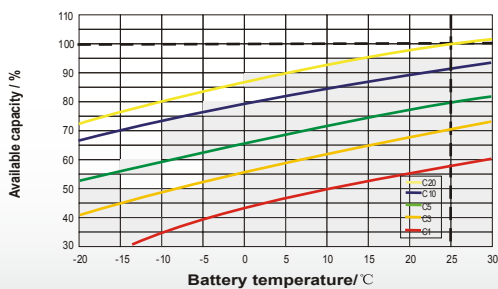
### Discharge Characteristics



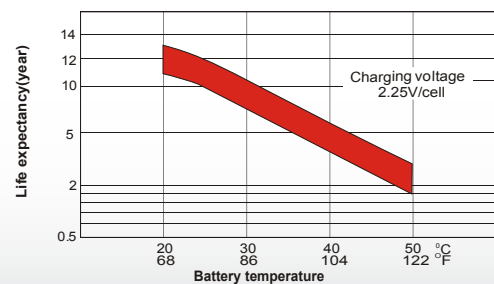
### Charging Characteristics



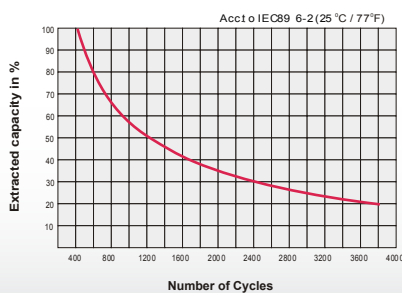
### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS. Storage Time

