

# UC 7.2-12

12V 7.2AH

Deep Cycle

# Ultracell®

'Quality in Every Language'

## UC7.2-12



## Physical Specification

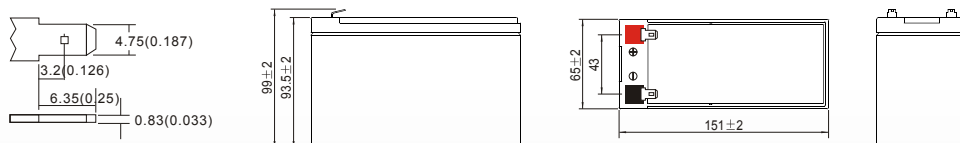
Part Number:	<b>UC7.2-12</b>
Length:	<b>151 ± 2 mm (5.95 inches)</b>
Width:	<b>65 ± 2 mm (2.56 inches)</b>
Container Height:	<b>93.5 ± 2 mm (3.68 inches)</b>
Total Height (with terminal):	<b>99 ± 2 mm (3.90 inches)</b>
Approx Weight:	<b>Approx 2.50kg (5.51lbs)</b>

## Specifications

	Normal Voltage	12V
	Normal Capacity (20HR)	7.2AH
<b>Terminal Type</b>	Standard Terminal	F1
	Optional Terminal	F2
<b>Container Material</b>	Standard Option	ABS
	Flame Retardant Option (FR)	ABS(UL94:VO)
<b>Rated Capacity</b>	7.72 AH/0.386A	(20hr, 1.80V/cell, 25°C / 77°F)
	7.20 AH/0.72A	(10hr, 1.80V/cell, 25°C / 77°F)
	6.31 AH/1.26A	(5hr, 1.75V/cell, 25°C / 77°F)
	5.72 AH/1.91A	(3hr, 1.75V/cell, 25°C / 77°F)
	46.5 AH/4.65A	(1hr, 1.60V/cell, 25°C / 77°F)
<b>Max Discharge Current</b>	108A (5s)	
<b>Internal Resistance</b>	Approx 18.0mΩ	
<b>Discharge Characteristics</b>	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 2.16A. 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%	
<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

### F1 Terminal



ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE

Ultracell (UK) Ltd | Vesty Business Park | Vesty Road | Liverpool | L30 1NY | United Kingdom  
Tel: +44 (0) 151 523 2777 Fax: +44 (0) 151 523 0855 Email: info@ultracell.co.uk

www.ultracell.co.uk



CE 1188 MH 29410

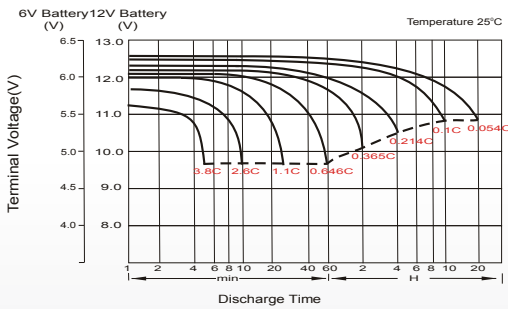
### Constant Current Discharge (Amperes) at 25°C (77°F)

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	10.5	8.87	7.75	5.58	4.43	3.59	2.23	1.74	1.41	1.15	1.00	0.816	0.680	0.382
1.80V/cell	13.5	10.7	9.16	6.58	5.15	4.03	2.44	1.87	1.51	1.23	1.07	0.865	0.720	0.386
1.75V/cell	14.8	11.7	9.86	6.83	5.35	4.21	2.53	1.91	1.54	1.26	1.10	0.880	0.727	0.390
1.70V/cell	16.1	12.5	10.4	7.11	5.56	4.35	2.63	1.96	1.58	1.29	1.12	0.893	0.734	0.397
1.65V/cell	17.4	13.3	11.0	7.50	5.70	4.49	2.70	2.04	1.63	1.33	1.15	0.907	0.750	0.402
1.60V/cell	18.9	14.2	11.7	7.92	5.94	4.65	2.79	2.11	1.69	1.37	1.17	0.916	0.757	0.404

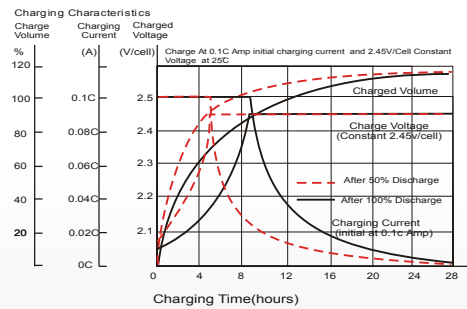
### Constant Power Discharge (Watts) at 25°C (77°F)

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	19.7	16.7	14.8	10.7	8.57	6.98	4.35	3.40	2.76	2.25	1.97	1.61	1.35	0.765
1.80V/cell	24.8	19.9	17.2	12.5	9.89	7.77	4.72	3.64	2.93	2.41	2.11	1.71	1.43	0.771
1.75V/cell	26.9	21.5	18.3	12.9	10.2	8.10	4.88	3.70	2.99	2.47	2.16	1.74	1.44	0.777
1.70V/cell	28.9	22.8	19.2	13.4	10.6	8.33	5.06	3.79	3.07	2.52	2.21	1.76	1.45	0.791
1.65V/cell	31.0	24.1	20.3	14.1	10.8	8.58	5.19	3.95	3.17	2.59	2.25	1.79	1.48	0.800
1.60V/cell	33.1	25.5	21.4	14.7	11.2	8.82	5.33	4.05	3.25	2.66	2.30	1.80	1.49	0.803

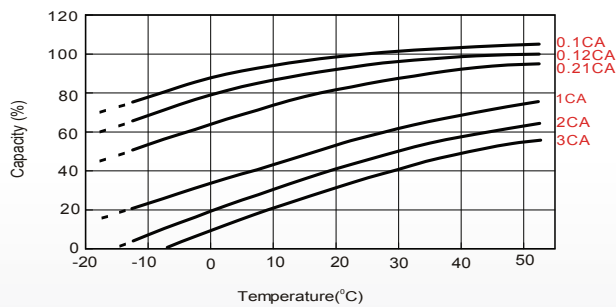
### Discharge Characteristics



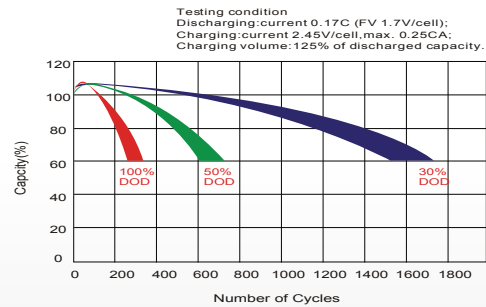
### Charging Characteristics (cycle use)



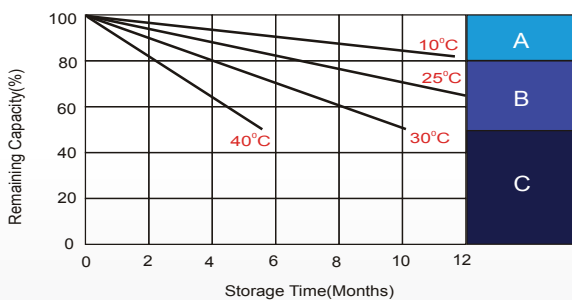
### Temperature Effects in Relation to Battery Capacity



### Cycle Life in Relation to Depth of Discharge



### 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.

ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE