UHR6.5-12

12V 6.5AH

High Rated

Ultracell®

'Quality in Every Language'

UHR6.5-12

Physical Specification

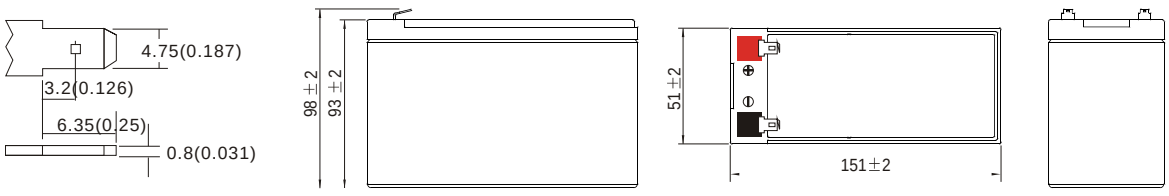
Part Number	**UHR6.5-12**
Length	**151 ± 2 mm**
Width	**51 ± 2 mm**
Container Height	**93 ± 2 mm**
Total Height (with terminal)	**98 ± 2 mm**
Approx Weight	**1.90 kg**

Specifications

	Nominal Voltage	12V
	Nominal Capacity	6.5AH
Terminal Type	Standard Terminal	F1
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	UL94-V0
Rated Capacity	20hr, 1.80V/cell, 25°C	6.69 AH/0.62A
	10hr, 1.80V/cell, 25°C	6.50 AH/0.75A
	5hr, 1.75V/cell, 25°C	5.65 AH/1.08
	3hr, 1.75V/cell, 25°C	4.95 AH/1.64A
	1hr, 1.60V/cell, 25°C	4.52 AH/4.54A
Max Discharge Current	97.5A (5s)	
Internal Resistance	Approx 35mΩ	
Discharge Characteristics	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 1.95A. Voltage 14.4V ~ 15.0V Temp. Coefficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5V ~ 13.8V Temp. Coefficient -20mV/°C
	Capacity affect by Temperature	40°C 103%
		25°C 100%
		0°C 86%
Design Floating Life at 20°C	12+ 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

F1 Terminal



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

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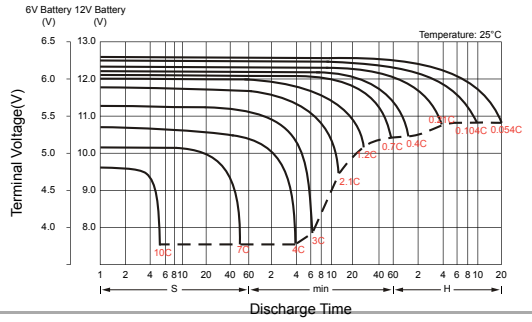
Constant Current Discharge (Amperes) at 20°C

F.V/ Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	18.9	13.5	10.5	8.55	6.57	4.71	3.67	2.14	1.58	1.25	1.07	0.902	0.765	0.632	0.356
1.80V/cell	21.1	15.0	11.4	9.19	7.04	5.07	3.91	2.23	1.62	1.30	1.10	0.970	0.813	0.669	0.359
1.75V/cell	23.9	16.5	12.5	9.89	7.31	5.27	4.09	2.32	1.65	1.33	1.13	0.989	0.826	0.676	0.362
1.70V/cell	26.3	18.0	13.4	10.4	7.61	5.48	4.22	2.41	1.70	1.36	1.15	1.019	0.837	0.683	0.369
1.67V/cell	28.9	19.4	14.3	11.1	8.03	5.62	4.37	2.47	1.78	1.41	1.18	1.038	0.850	0.697	0.374
1.60V/cell	31.9	20.7	14.9	11.7	8.48	5.86	4.52	2.56	1.82	1.46	1.22	1.057	0.859	0.704	0.376

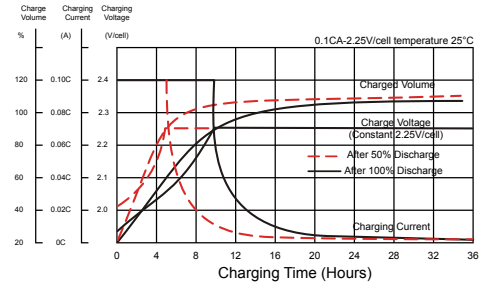
Constant Power Discharge (Watts) at 20°C

F.V/ Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	34.5	25.0	19.5	16.1	12.5	9.06	7.07	4.17	3.10	2.47	2.12	1.80	1.49	1.25	0.707
1.80V/cell	38.2	27.5	21.1	17.1	13.2	9.70	7.50	4.31	3.16	2.55	2.16	1.93	1.58	1.32	0.713
1.75V/cell	42.2	29.7	22.8	18.1	13.6	9.99	7.81	4.45	3.21	2.60	2.22	1.98	1.61	1.33	0.718
1.70V/cell	45.2	31.6	24.1	18.9	14.1	10.3	8.03	4.62	3.29	2.66	2.27	2.01	1.63	1.35	0.731
1.67V/cell	49.1	33.9	25.3	20.0	14.7	10.5	8.25	4.71	3.41	2.75	2.34	2.05	1.65	1.37	0.740
1.60V/cell	53.0	35.2	26.2	21.0	15.4	10.9	8.50	4.85	3.50	2.82	2.39	2.09	1.66	1.39	0.743

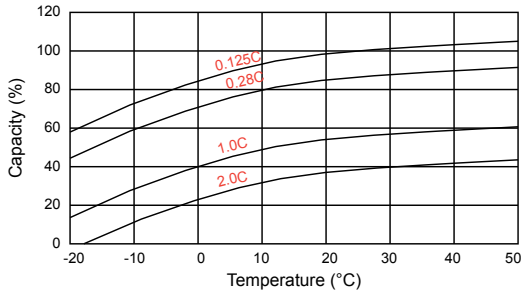
Discharge Characteristics



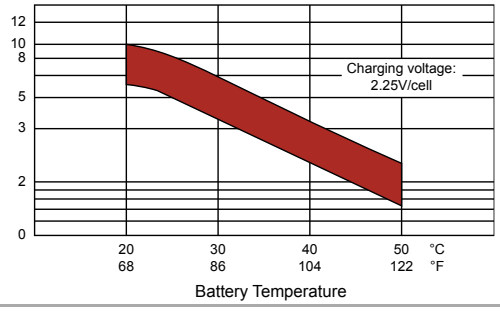
Float Charging Characteristics



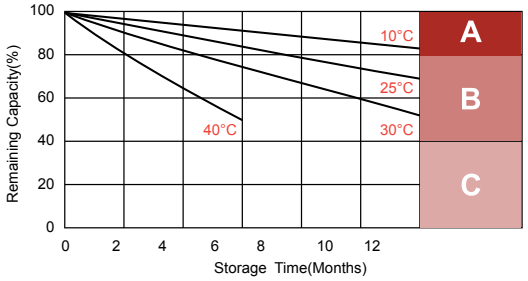
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time

A — No supplementary required
(Carryout 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 limitied 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.

Ultracell (UK) Ltd | Vesty Business Park, Vesty Road, Liverpool, L30 1NY, United Kingdom
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