

UHR6.5-12

12V 6.5AH

High Rated

Ultracell®

'Quality in Every Language'

UHR6.5-12



Physical Specification

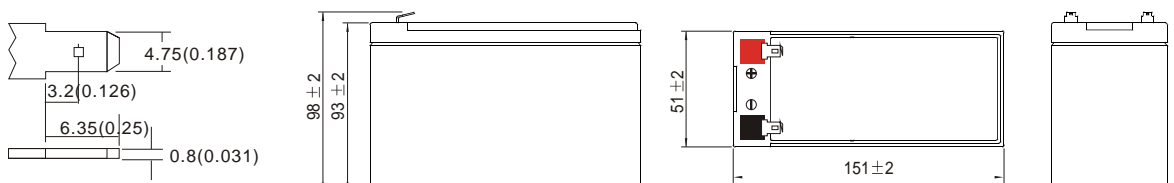
Part Number	UHR6.5-12
Length	151 ± 2 mm
Width	51 ± 2 mm
Container Height	93 ± 2 mm
Total Height (with terminal)	98 ± 2 mm
Approx Weight	1.90 kg

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 35m Ω	
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C
		Charge: 0 ~ 40°C
		Storage: -15 ~ 40°C
Nominal Operating Temp. Range	Cycle Use	25 ± 3°C
		Initial Charging Current less than 1.95A. Voltage 14.4V ~ 15.0V Temp. Coefficient -30mV/°C
		Standby Use
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



Revised: 27 Nov 2014

ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE

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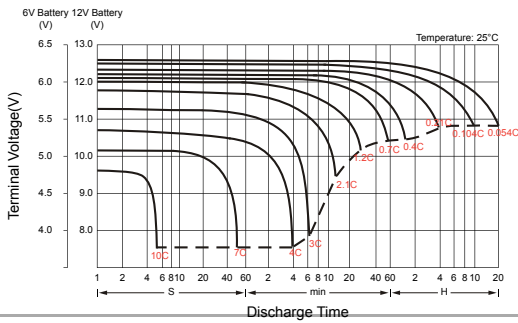
Constant Current Discharge (Amperes) at 20°C

F.V/ Tim e	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	189	135	105	855	657	471	367	2.14	1.58	1.25	1.07	0.902	0.765	0.632	0.356
1.80V/cell	21.1	150	114	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	239	165	125	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	263	180	134	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	289	194	143	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	319	207	149	11.7	8.48	5.86	4.52	2.56	1.82	1.46	1.22	1.057	0.859	0.704	0.376

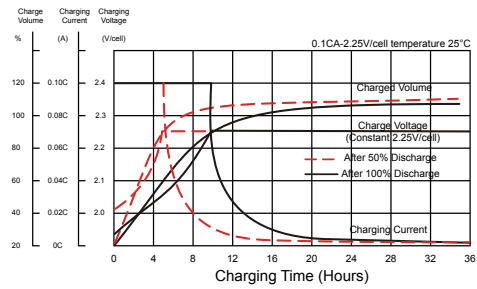
Constant Power Discharge (Watts) at 20°C

F.V/ Tim e	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	345	250	195	161	125	9.06	7.07	4.17	3.10	2.47	2.12	1.80	1.49	1.25	0.707
1.80V/cell	382	275	211	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	422	297	228	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	452	316	241	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	491	339	253	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	530	352	262	21.0	15.4	10.9	8.50	4.85	3.50	2.82	2.39	2.09	1.66	1.39	0.743

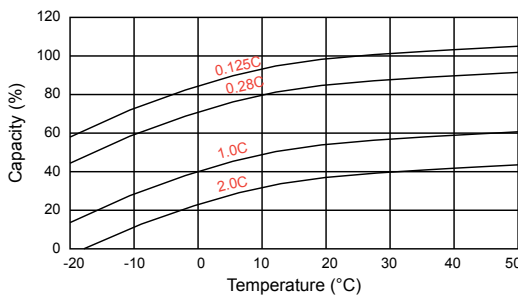
Discharge Characteristics



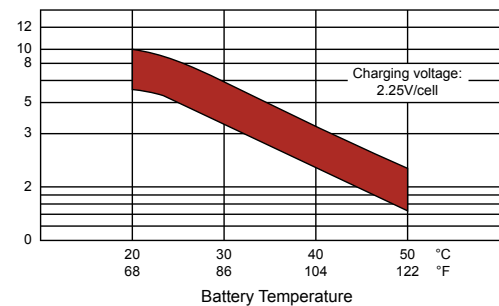
Float Charging Characteristics



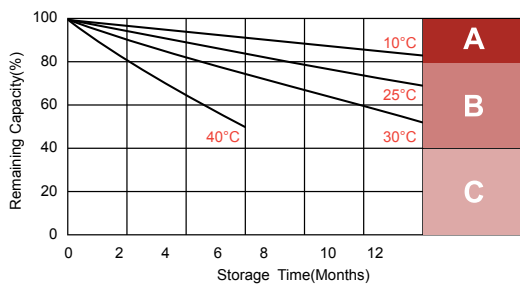
Temperature Effects in Relation to Battery Capacity



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 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.