

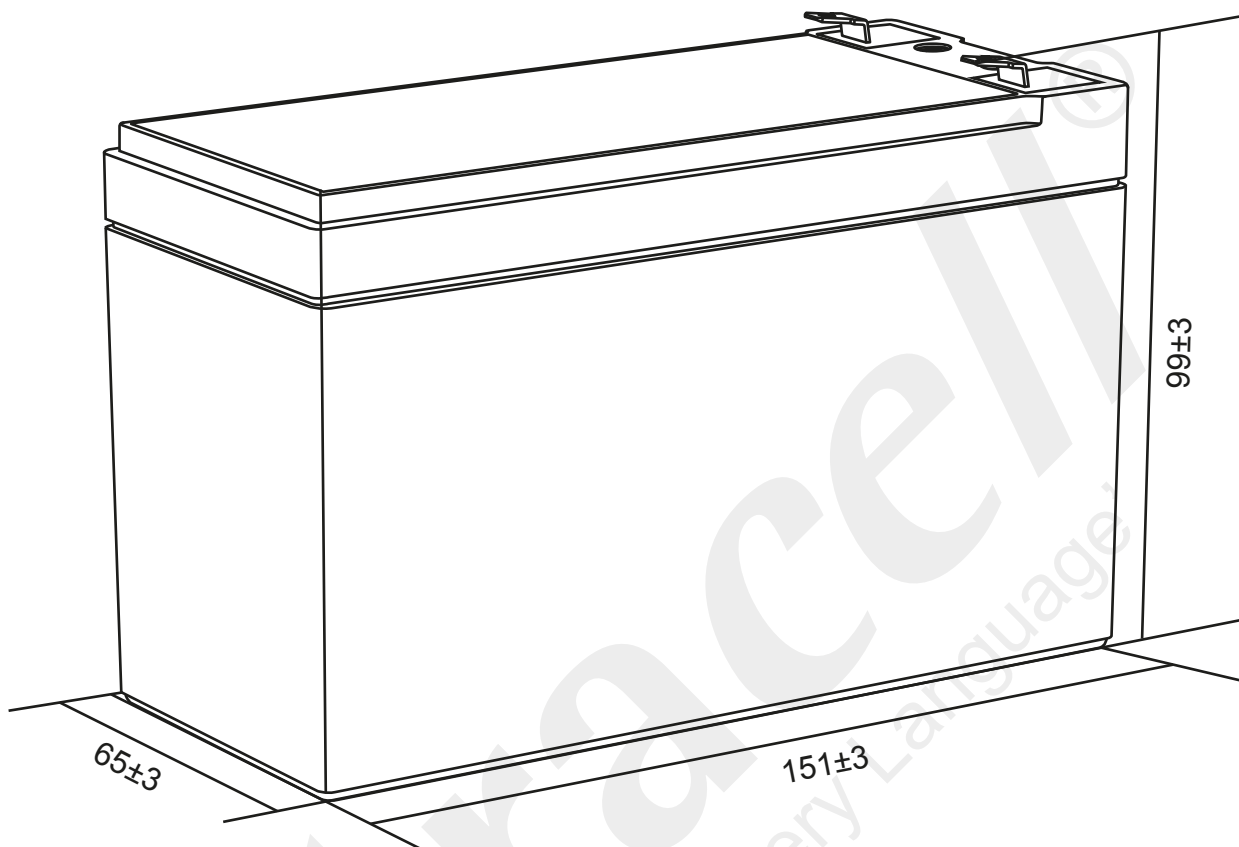
# Ultracell®

'Quality in Every Language'

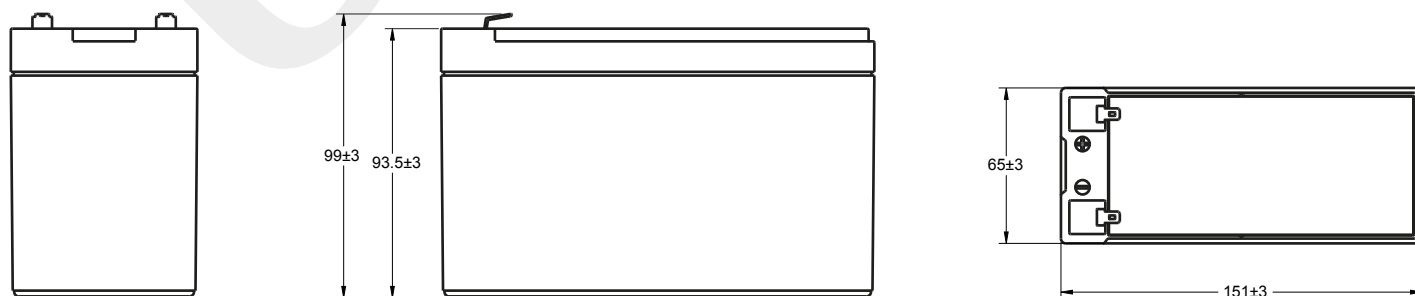
UXL7-12

12V 7Ah

Long Life Series



## Technical Dimensions (mm)





MH 29410



EMC 1188-C



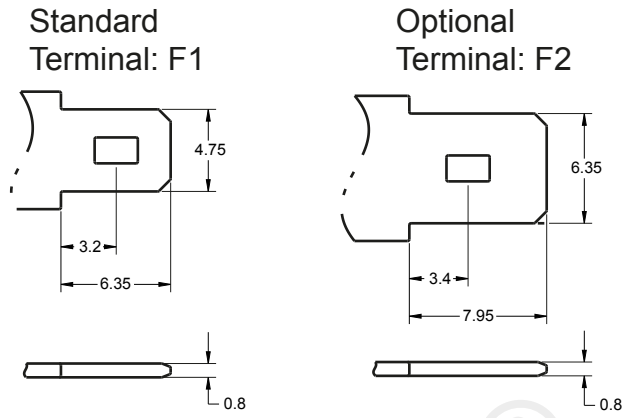
IEC 60896  
IEC 62321



Image



Terminal Dimensions (mm)



Technical Specification

<b>Output</b>	Nominal Voltage	12V
	Nominal Capacity (20HR)	7Ah
<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>	(20HR 1.75V/cell, 25°C)	7.00 Ah/0.350A
	(10HR 1.75V/cell, 25°C)	6.92 Ah/0.692A
	(5HR 1.75V/cell, 25°C)	6.40 Ah/1.28A
	(3HR 1.75V/cell, 25°C)	5.76 Ah/1.92A
	(1HR 1.60V/cell, 25°C)	4.88 Ah/4.88A
<b>Max Discharge Current</b>	105A (5s)	
<b>Internal Resistance</b>	Approx 18mΩ	
<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 2.1A. Voltage 14.4V ~ 15.0V @ 25°C Temp. Coefficient -30mV/°C
	Standby Use	Initial Charging Current less than 2.1A. Voltage 13.5V ~ 13.8V @ 25°C Temp. Coefficient -20mV/°C
	Capacity affected by Temperature	40°C 103% 25°C 100% 0°C 86%
<b>Design Floating Life at 20°C</b>	12 Years	

Self Discharge

Ultracell® UXL batteries may be stored for up to 6 months at 25°C and then a refresh charge is required. For higher temperatures the time intervals will be shorter.

Constant Current Discharge / Constant Power Discharge At 25°C (Amperes & Watts/Cell)

A = Amperes W = Watts

F.V/TIME	10 min	15 min	20 min	30 min	45 min	60 min	2 hours	3 hours	4 hours	5 hours	6 hours	8 hours	10 hours	20 hours
A \ W														
1.85V/cell	15.5	12.3	10.0	7.46	5.48	4.47	2.60	1.86	1.47	1.24	1.06	0.837	0.676	0.343
	29.7	23.6	19.3	14.4	10.6	8.70	5.08	3.66	2.90	2.46	2.11	1.66	1.34	0.686
1.80V/cell	16.3	12.8	10.3	7.65	5.58	4.56	2.64	1.89	1.49	1.26	1.08	0.847	0.684	0.347
	31.0	24.4	19.8	14.7	10.8	8.84	5.15	3.71	2.93	2.49	2.13	1.68	1.36	0.693
1.75V/cell	17.1	13.2	10.6	7.83	5.70	4.64	2.68	1.92	1.51	1.28	1.09	0.857	0.692	0.350
	32.3	25.2	20.3	15.0	11.0	8.96	5.21	3.76	2.97	2.52	2.15	1.70	1.37	0.700
1.70V/cell	17.9	13.7	11.0	8.01	5.80	4.72	2.72	1.95	1.53	1.29	1.11	0.868	0.700	0.354
	33.6	25.9	20.8	15.3	11.1	9.09	5.28	3.80	3.00	2.54	2.18	1.72	1.39	0.708
1.65V/cell	18.4	14.0	11.2	8.12	5.87	4.77	2.74	1.96	1.54	1.30	1.11	0.875	0.705	0.356
	34.4	26.4	21.1	15.4	11.2	9.17	5.32	3.83	3.02	2.56	2.19	1.73	1.40	0.712
1.60V/cell	19.5	14.6	11.6	8.37	6.03	4.88	2.80	2.00	1.57	1.33	1.13	0.889	0.716	0.361
	36.2	27.4	21.8	15.8	11.5	9.34	5.41	3.90	3.07	2.60	2.23	1.75	1.42	0.722



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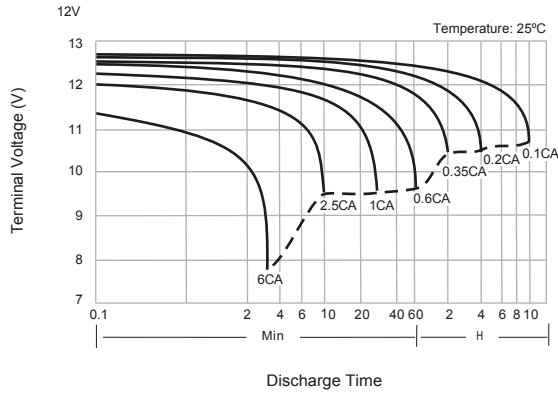
EMC 1188-C



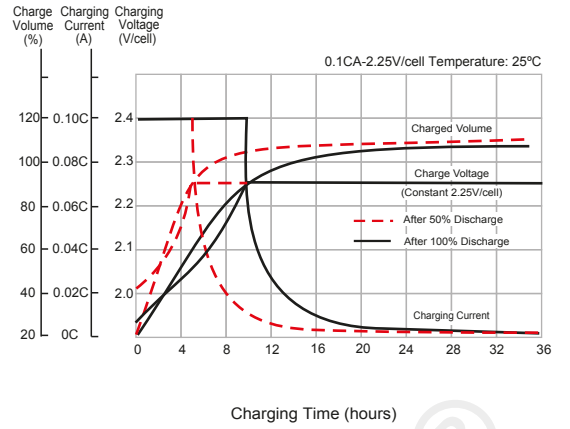
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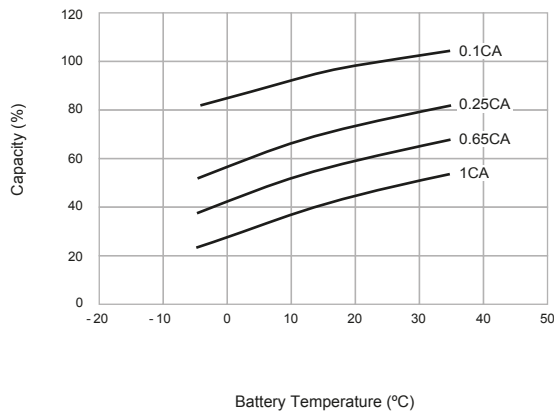
## Discharge Characteristics



## Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Effect of Temperature on Long Term Float Life

