

**UXL250-12**



**Physical Specification**

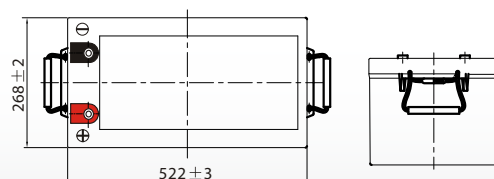
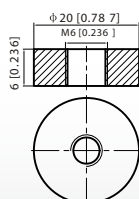
Part Number:	UXL250-12
Length:	522 ± 3 mm ( 20.55 inches )
Width:	268 ± 3 mm ( 10.55 inches )
Container Height:	220 ± 3 mm ( 8.66 inches )
Total Height (with terminal):	226 ± 3 mm ( 8.90 inches )
Approx Weight:	Approx 77.0 Kg (169.8 lbs)

**Specifications**

	Nominal Voltage	12V
	Nominal Capacity (10HR)	250AH
Terminal Type	Standard Terminal	F11
	Optional Terminal	-
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	267.5 AH/13.38A	(20hr,1.80V/cell, 25°C / 77°F)
	250.0 AH/25.0A	(10hr,1.80V/cell, 25°C / 77°F)
	217.5 AH/43.5A	(5hr,1.75V/cell, 25°C / 77°F)
	195.0 AH/65.0A	(3hr,1.75V/cell, 25°C / 77°F)
	155.0 AH/155.0A	(1hr,1.60V/cell, 25°C / 77°F)
Max Discharge Current	2500 A (5s)	
Internal Resistance	Approx 2.5mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)
		Charge: 0 ~ 40°C (32 ~ 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 75.0A. 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%
Design Floating Life at 20°C	15 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**

**F11 Terminal**



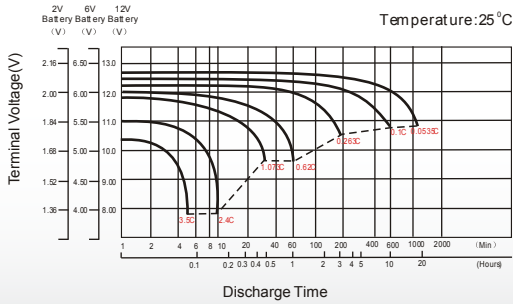
## Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	292.5	246.0	218.3	181.0	139.7	119.5	77.4	58.2	47.7	40.1	35.1	28.2	24.2	12.9
1.80V/cell	334.7	276.2	241.3	196.6	150.7	126.1	83.2	62.5	50.7	42.5	37.2	29.7	25.0	13.4
1.75V/cell	380.1	311.3	266.7	213.6	164.3	137.5	86.5	65.0	52.4	43.5	38.4	30.7	25.7	13.7
1.70V/cell	429.3	345.4	294.3	233.2	177.0	145.5	91.1	68.4	54.8	46.0	40.2	31.9	26.7	14.1
1.65V/cell	461.0	369.8	313.1	246.1	187.3	150.5	94.5	71.2	56.9	47.5	41.6	33.0	27.4	14.5
1.60V/cell	\	405.1	340.2	262.6	194.7	155.0	96.9	73.0	58.2	48.6	42.5	33.6	28.0	14.7

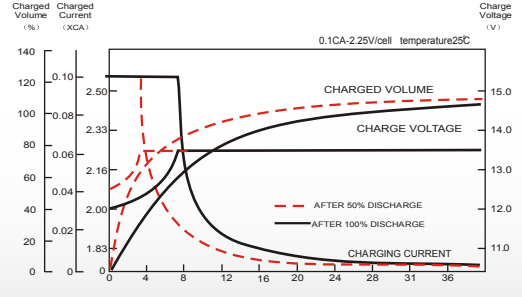
## Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	546.2	464.0	415.8	348.6	271.3	232.9	151.8	114.6	94.1	79.4	69.8	56.2	48.4	25.9
1.80V/cell	617.7	514.1	453.0	372.9	290.4	244.5	162.1	122.4	99.5	83.8	73.6	59.0	49.9	26.7
1.75V/cell	690.4	572.3	495.9	401.9	313.7	265.3	168.0	126.8	102.6	85.5	75.7	60.8	51.2	27.4
1.70V/cell	762.3	626.2	543.3	436.4	336.7	279.9	176.6	133.2	107.0	90.2	79.2	63.3	53.1	28.0
1.65V/cell	811.2	665.4	573.7	456.8	353.1	287.5	182.0	138.0	110.8	92.8	81.7	65.3	54.5	28.9
1.60V/cell	\	716.9	616.5	484.0	365.0	294.5	185.7	140.9	112.9	94.7	83.2	66.3	55.6	29.3

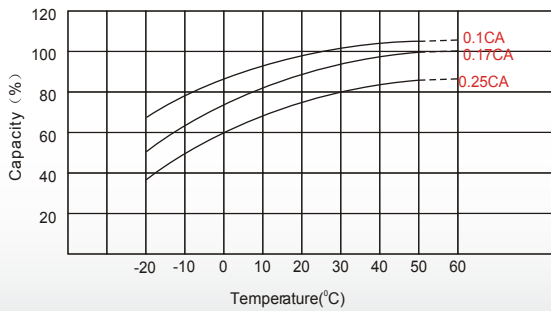
### Discharge Characteristics



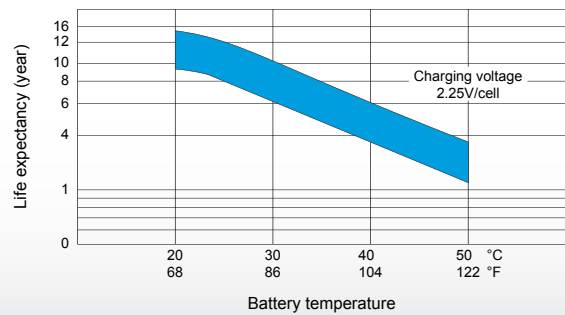
### Float Charging Characteristics



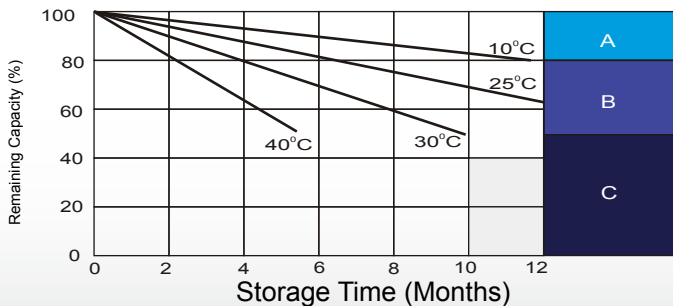
### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



### Self Discharge Characteristics



**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 2.25V/cell.  
 3. Charged for 8 ~ 10 hours at limited current 0.05 CA.

**C**

Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.