

# UL150-12

12V 150AH

General

# Ultracell®

Quality in Every Language

## UL150-12



## Physical Specification

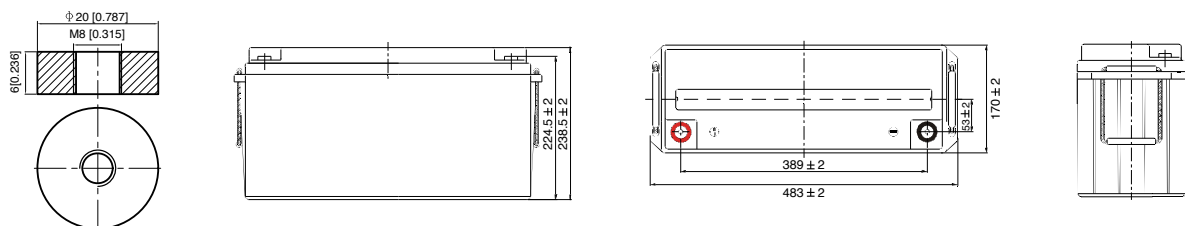
Part Number	UL150-12
Length	483 ± 2 mm
Width	170 ± 2 mm
Container Height	239 ± 2 mm
Total Height (with terminal)	239 ± 2 mm
Approx Weight	Approx 43.50 kg

## Specifications

	Nominal Voltage	12V
	Nominal Capacity (20HR)	150AH
Terminal Type	Standard Terminal	F11
	Optional Terminal	-
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	UL94:VO
Rated Capacity	20hr, 1.80V/cell, 25°C	156.0 AH/7.80A
	10hr, 1.80V/cell, 25°C	150.0 AH/15.00A
	5hr, 1.75V/cell, 25°C	129.0 AH/25.80A
	3hr, 1.75V/cell, 25°C	117.0 AH/39.00A
	1hr, 1.60V/cell, 25°C	91.50 AH/91.50A
Max Discharge Current	1500.00 (5s)	
Internal Resistance	~3.500mΩ	
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 45.00A Voltage 14.40V ~ 15.00V at 25°C Temp. Coefficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.50V ~ 13.80V at 25°C Temp. Coefficient -20mV/°C
Capacity affect by Temperature	40°C	103%
	25°C	100%
	0°C	86%
Design Floating Life at 20°C	10 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



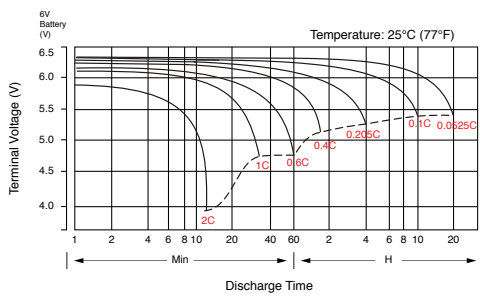
### Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	256.7	201.8	171.6	143.6	114.1	86.4	70.7	45.0	35.6	29.1	23.5	20.4	16.6	14.2	7.73
1.80V/cell	344.6	257.9	207.4	169.7	134.6	100.4	79.2	49.2	38.3	31.1	25.2	21.9	17.6	15.0	7.80
1.75V/cell	388.5	283.4	226.5	182.6	139.8	104.2	82.9	51.0	39.0	31.8	25.8	22.5	17.9	15.1	7.88
1.70V/cell	427.9	308.9	241.8	191.9	145.5	108.4	85.5	53.0	40.1	32.6	26.5	23.0	18.1	15.3	8.03
1.65V/cell	471.8	333.3	257.2	203.8	153.5	111.1	88.4	54.5	41.8	33.7	27.2	23.5	18.4	15.6	8.13
1.60V/cell	\	361.9	275.0	217.1	162.0	115.8	91.5	56.3	43.1	34.8	28.1	24.0	18.6	15.8	8.18

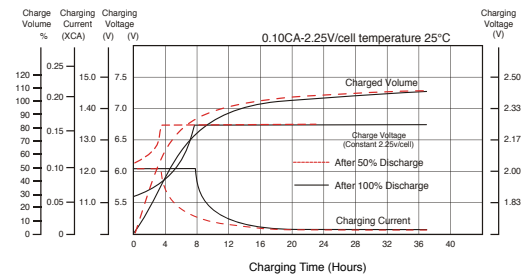
### Constant Power Discharge ( Watts) at 25°C (77°F)

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	469.4	372.8	320.3	270.6	217.5	166.0	136.4	87.5	69.4	56.9	46.0	40.1	32.7	28.0	15.3
1.80V/cell	623.4	470.8	381.8	315.2	252.7	191.6	152.0	94.8	74.3	60.4	49.1	42.9	34.6	29.6	15.4
1.75V/cell	687.9	509.0	411.9	335.8	260.2	196.9	158.3	98.0	75.4	61.5	50.3	43.9	35.1	29.9	15.6
1.70V/cell	736.5	542.2	433.6	350.3	269.3	204.0	162.7	101.7	77.3	63.0	51.4	44.8	35.6	30.2	15.8
1.65V/cell	800.6	579.6	457.5	369.3	281.8	207.2	167.0	103.9	80.2	65.0	52.7	45.6	36.1	30.7	16.0
1.60V/cell	\	615.1	481.2	389.2	295.4	214.8	172.0	106.9	82.3	66.8	54.2	46.5	36.3	31.0	16.1

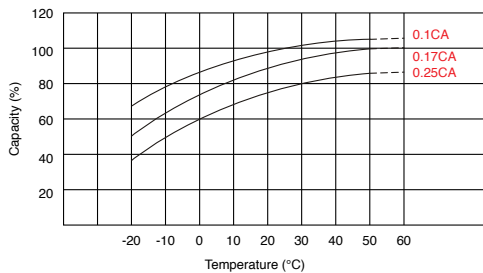
### Discharge Characteristics



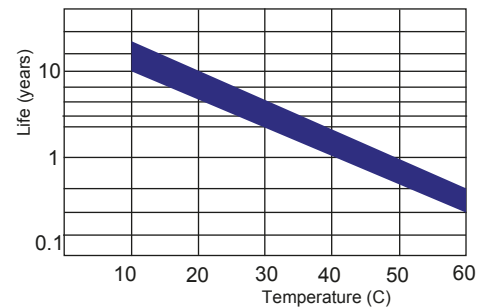
### Float Charging Characteristics



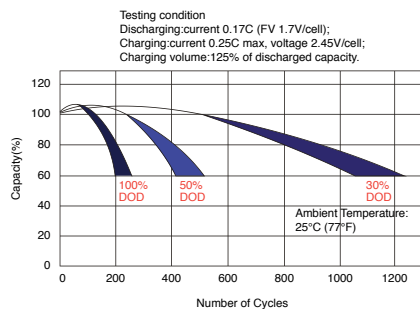
### Temperature Effects in Relation to Battery Capacity



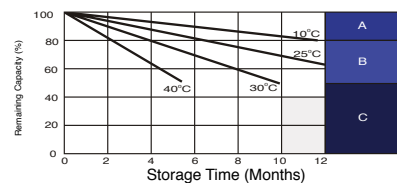
### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### 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.