

UC100-12



Physical Specification

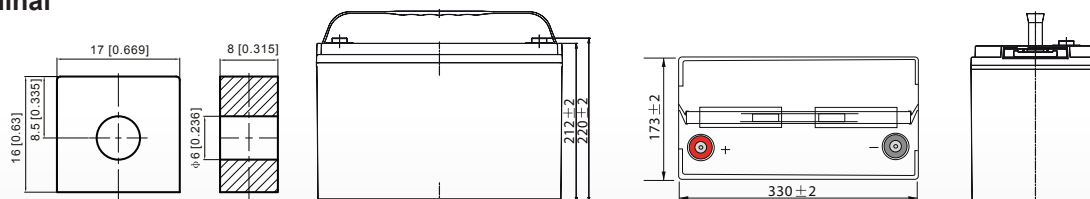
Part Number:	UC100-12
Length:	330 ± 2 mm (12.99 inches)
Width:	173 ± 2 mm (6.81 inches)
Container Height:	212 ± 2 mm (8.35 inches)
Total Height (with terminal):	220 ± 2 mm (8.66 inches)
Approx Weight:	Approx 30.4kg (67.0lbs)

Specifications

Terminal Type	Normal Voltage	12V
	Normal Capacity (20HR)	100.0AH
	Standard Terminal	F10
Container Material	Optional Terminal	F11
	Standard Option	ABS
Rated Capacity	Flame Retardant Option (FR)	ABS(UL94:VO)
	107.2 AH/5.36A	(20hr, 1.80V/cell, 25°C / 77°F)
	100.0 AH/10.0A	(10hr, 1.80V/cell, 25°C / 77°F)
	87.7 AH/17.5A	(5hr, 1.75V/cell, 25°C / 77°F)
	79.5 AH/26.5A	(3hr, 1.75V/cell, 25°C / 77°F)
Max Discharge Current	64.6 AH/64.6A	(1hr, 1.60V/cell, 25°C / 77°F)
	1200A (5s)	
Internal Resistance	Approx 4.9mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F) Charge: 0 ~ 40°C (5 ~ 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 30.0A.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	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

F10 Terminal



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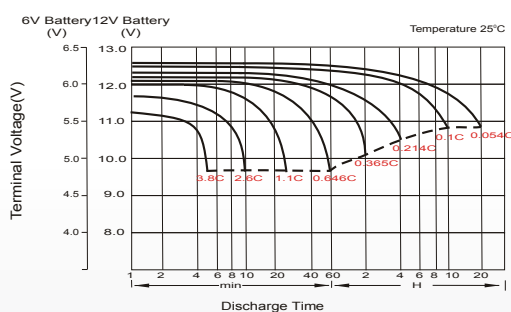
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	146.4	123.2	107.7	77.5	61.5	49.9	31.0	24.2	19.6	15.9	13.9	11.3	9.4	5.31
1.80V/cell	187.1	148.9	127.3	91.4	71.6	55.9	33.9	26.0	20.9	17.1	14.9	12.0	10.0	5.36
1.75V/cell	205.6	162.6	136.9	94.9	74.3	58.5	35.1	26.5	21.4	17.5	15.3	12.2	10.1	5.41
1.70V/cell	224.1	173.6	143.9	98.8	77.2	60.4	36.5	27.2	22.0	18.0	15.6	12.4	10.2	5.51
1.65V/cell	241.8	184.6	152.8	104.2	79.2	62.4	37.5	28.4	22.7	18.5	16.0	12.6	10.4	5.58
1.60V/cell	262.5	197.4	162.8	110.0	82.5	64.6	38.8	29.3	23.4	19.1	16.3	12.7	10.5	5.61

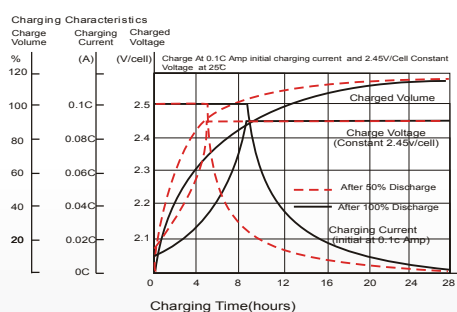
Constant Power Discharge (Watts) at 25°C (77°F)

F.V/Time	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	273.2	232.3	205.2	148.8	119.0	96.9	60.4	47.2	38.4	31.3	27.4	22.4	18.7	10.6
1.80V/cell	344.4	276.5	238.8	173.5	137.3	107.9	65.6	50.6	40.8	33.5	29.3	23.7	19.8	10.7
1.75V/cell	373.8	299.1	254.8	179.3	141.8	112.5	67.8	51.4	41.6	34.3	30.1	24.1	20.0	10.8
1.70V/cell	401.7	316.9	266.3	185.8	147.0	115.7	70.3	52.7	42.6	35.1	30.7	24.5	20.2	11.0
1.65V/cell	430.4	334.8	281.5	195.2	150.2	119.2	72.1	54.8	44.0	36.0	31.3	24.8	20.6	11.1
1.60V/cell	459.4	353.8	296.8	204.0	155.1	122.5	74.1	56.2	45.1	37.0	31.9	25.0	20.8	11.2

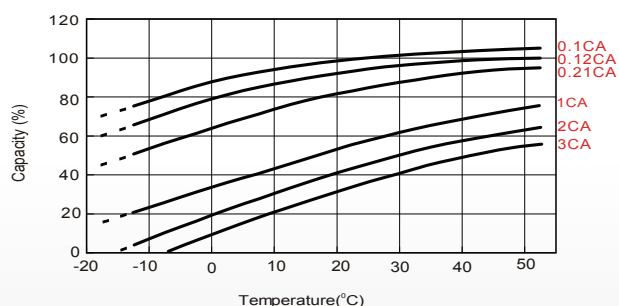
Discharge Characteristics



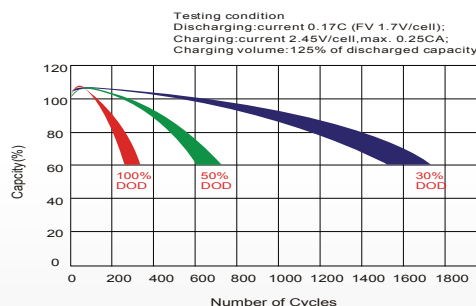
Charging Characteristics (cycle use)



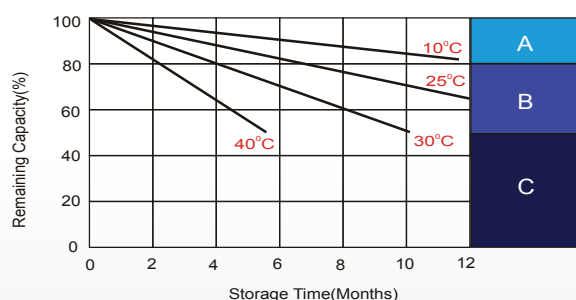
Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- A** No supplementary charge required
(Carry out 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.

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UC120-12



Physical Specification

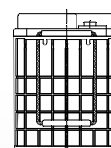
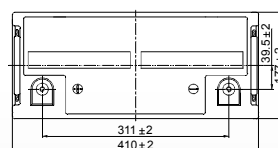
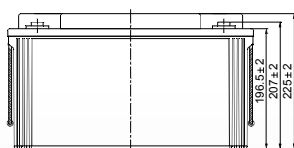
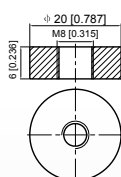
Part Number:	UC120-12
Length:	410 ± 2 mm (16.14 inches)
Width:	177 ± 2 mm (6.97 inches)
Container Height:	225 ± 2 mm (8.86 inches)
Total Height (with terminal):	225 ± 2 mm (8.66 inches)
Approx Weight:	Approx 37.00kg

Specifications

Terminal Type	Normal Voltage	12V
	Normal Capacity (20HR)	120.0AH
	Standard Terminal	F11
Container Material	Optional Terminal	-
	Standard Option	ABS
Rated Capacity	Flame Retardant Option (FR)	ABS(UL94:VO)
	128.6 AH/6.43A	(20hr, 1.80V/cell, 25°C / 77°F)
	120.0 AH/12.0A	(10hr, 1.80V/cell, 25°C / 77°F)
	105.2 AH/21.0A	(5hr, 1.75V/cell, 25°C / 77°F)
	95.4 AH/31.8A	(3hr, 1.75V/cell, 25°C / 77°F)
Max Discharge Current	77.5 AH/77.5A	(1hr, 1.60V/cell, 25°C / 77°F)
	1300A (5s)	
Internal Resistance	Approx 4.0mΩ	
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 36.0A.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	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

F11 Terminal



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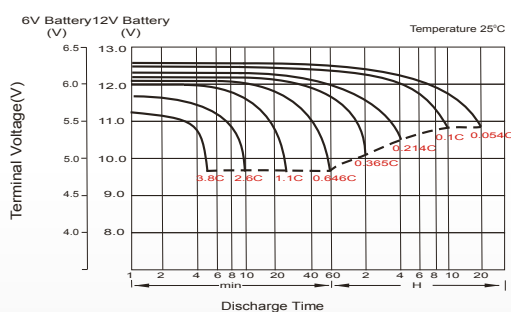
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	175.7	147.8	129.2	93.0	73.8	59.9	37.2	29.0	23.5	19.1	16.7	13.6	11.3	6.37
1.80V/cell	224.5	178.6	152.7	109.7	85.9	67.1	40.6	31.2	25.1	20.5	17.9	14.4	12.0	6.43
1.75V/cell	246.7	195.1	164.3	113.9	89.1	70.2	42.1	31.8	25.7	21.0	18.4	14.7	12.1	6.49
1.70V/cell	268.9	208.3	172.6	118.5	92.7	72.4	43.8	32.7	26.3	21.6	18.7	14.9	12.2	6.61
1.65V/cell	290.2	221.5	183.4	125.0	95.0	74.9	45.0	34.1	27.2	22.2	19.2	15.1	12.5	6.70
1.60V/cell	315.0	236.9	195.4	132.0	99.0	77.5	46.5	35.1	28.1	22.9	19.6	15.3	12.6	6.73

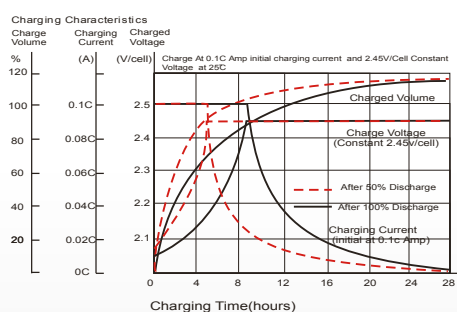
Constant Power Discharge (Watts) at 25°C (77°F)

F.V/Time	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	327.8	278.7	246.2	178.6	142.8	116.3	72.5	56.7	46.0	37.5	32.9	26.9	22.4	12.8
1.80V/cell	413.3	331.7	286.6	208.2	164.8	129.5	78.7	60.7	48.9	40.2	35.2	28.5	23.8	12.9
1.75V/cell	448.5	358.9	305.7	215.1	170.2	135.0	81.4	61.7	49.9	41.1	36.1	29.0	24.0	13.0
1.70V/cell	482.0	380.3	319.5	223.0	176.4	138.9	84.4	63.2	51.1	42.1	36.8	29.3	24.2	13.2
1.65V/cell	516.5	401.8	337.8	234.2	180.2	143.1	86.5	65.8	52.8	43.2	37.5	29.8	24.7	13.3
1.60V/cell	551.2	424.6	356.2	244.8	186.1	147.0	88.9	67.4	54.2	44.4	38.3	30.0	24.9	13.4

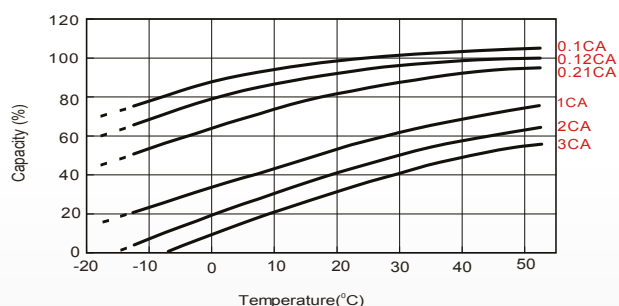
Discharge Characteristics



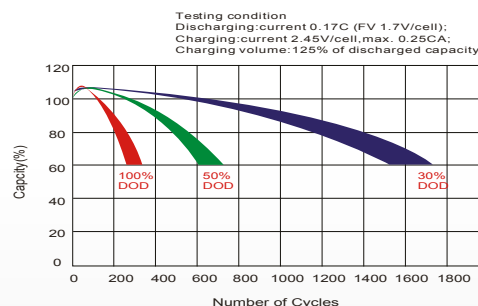
Charging Characteristics (cycle use)



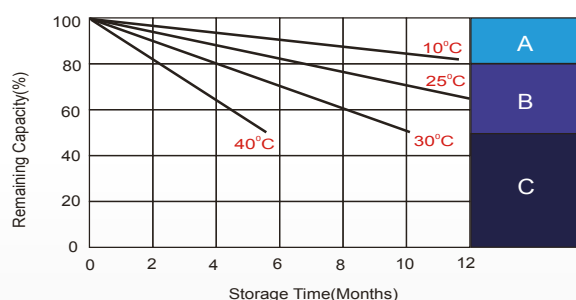
Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- A** No supplementary charge required
(Carry out 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.

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UC150-12



Physical Specification

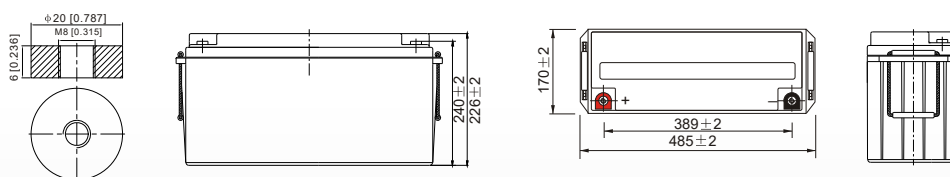
Part Number:	UC150-12
Length:	485 ± 2 mm (19.09 inches)
Width:	170 ± 2 mm (6.69 inches)
Container Height:	240 ± 2 mm (9.45 inches)
Total Height (with terminal):	240 ± 2 mm (9.45 inches)
Approx Weight:	Approx 43.00kg

Specifications

Terminal Type	Normal Voltage	12V
	Normal Capacity (20HR)	150.0AH
	Standard Terminal	F11
Container Material	Optional Terminal	-
	Standard Option	ABS
Rated Capacity	Flame Retardant Option (FR)	ABS(UL94:VO)
	160.8 AH/8.04A	(20hr, 1.80V/cell, 25°C / 77°F)
	150.0 AH/15.0A	(10hr, 1.80V/cell, 25°C / 77°F)
	131.6 AH/26.3A	(5hr, 1.75V/cell, 25°C / 77°F)
	119.3 AH/39.8A	(3hr, 1.75V/cell, 25°C / 77°F)
Max Discharge Current	96.9 AH/96.9A	(1hr, 1.60V/cell, 25°C / 77°F)
	1500A (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 45.0A.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	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

F11 Terminal



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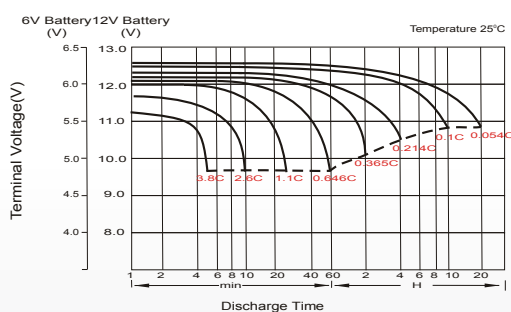
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	219.6	184.8	161.5	116.2	92.3	74.9	46.5	36.3	29.4	23.9	20.8	17.0	14.2	7.97
1.80V/cell	280.6	223.3	190.9	137.1	107.3	83.9	50.8	39.0	31.4	25.6	22.3	18.0	15.0	8.04
1.75V/cell	308.3	243.9	205.3	142.3	111.4	87.8	52.7	39.8	32.1	26.3	23.0	18.3	15.2	8.12
1.70V/cell	336.1	260.4	215.8	148.2	115.8	90.5	54.8	40.9	32.9	27.0	23.4	18.6	15.3	8.27
1.65V/cell	362.7	276.9	229.2	156.3	118.7	93.6	56.3	42.6	34.1	27.7	23.9	18.9	15.6	8.37
1.60V/cell	393.8	296.1	244.2	165.0	123.8	96.9	58.2	43.9	35.1	28.6	24.5	19.1	15.8	8.42

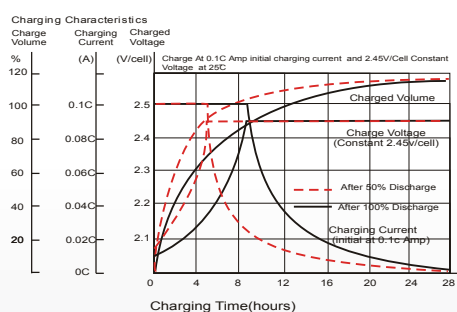
Constant Power Discharge (Watts) at 25°C (77°F)

F.V/Time	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	409.8	348.4	307.7	223.3	178.5	145.4	90.7	70.9	57.5	46.9	41.1	33.6	28.0	15.9
1.80V/cell	516.6	414.7	358.2	260.3	205.9	161.9	98.3	75.9	61.1	50.2	44.0	35.6	29.7	16.1
1.75V/cell	560.6	448.6	382.2	268.9	212.7	168.7	101.7	77.1	62.4	51.4	45.1	36.2	30.0	16.2
1.70V/cell	602.5	475.4	399.4	278.8	220.6	173.6	105.5	79.0	63.9	52.6	46.0	36.7	30.2	16.5
1.65V/cell	645.6	502.2	422.3	292.8	225.2	178.8	108.1	82.2	65.9	54.0	46.9	37.2	30.8	16.7
1.60V/cell	689.0	530.7	445.2	306.0	232.6	183.7	111.1	84.3	67.7	55.5	47.8	37.5	31.1	16.8

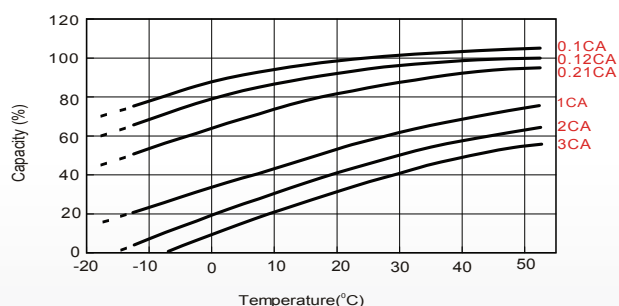
Discharge Characteristics



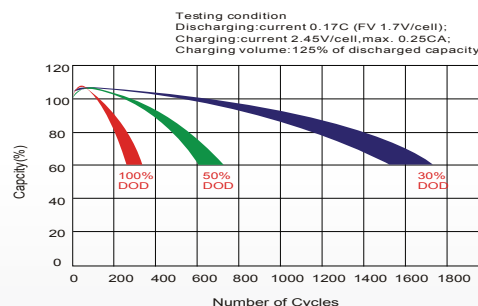
Charging Characteristics (cycle use)



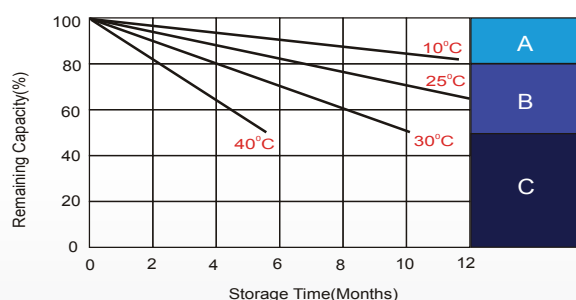
Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- A** No supplementary charge required
(Carry out 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.

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UC200-12



Physical Specification

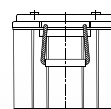
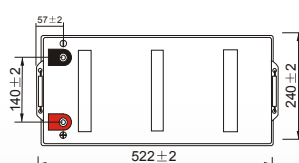
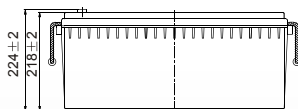
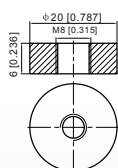
Part Number:	UC200-12
Length:	522 ± 2 mm (20.55 inches)
Width:	240 ± 2 mm (9.45 inches)
Container Height:	218 ± 2 mm (8.58 inches)
Total Height (with terminal):	224 ± 2 mm (8.81 inches)
Approx Weight:	Approx 61.5kg (135.6lbs)

Specifications

Terminal Type	Normal Voltage	12V
	Normal Capacity (20HR)	200.0AH
	Standard Terminal	F11
Container Material	Optional Terminal	-
	Standard Option	ABS
Rated Capacity	Flame Retardant Option (FR)	ABS(UL94:VO)
	214.4 AH/10.7A	(20hr, 1.80V/cell, 25°C / 77°F)
	200.0 AH/20.0A	(10hr, 1.80V/cell, 25°C / 77°F)
	175.4 AH/35.1A	(5hr, 1.75V/cell, 25°C / 77°F)
	159.0 AH/53.0A	(3hr, 1.75V/cell, 25°C / 77°F)
Max Discharge Current	129.2 AH/129.2A	(1hr, 1.60V/cell, 25°C / 77°F)
	2000A (5s)	
Internal Resistance	Approx 2.7mΩ	
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 60.0A.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	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

F11 Terminal



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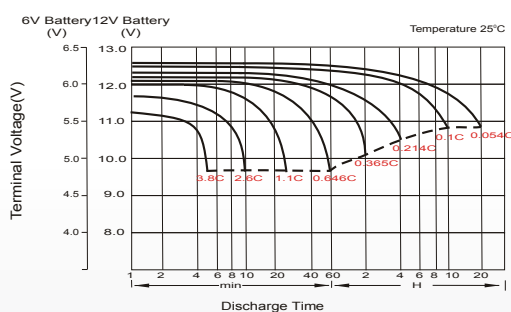
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	292.8	246.4	215.3	154.9	123.0	99.9	62.0	48.4	39.2	31.8	27.8	22.7	18.9	10.62
1.80V/cell	374.2	297.7	254.5	182.8	143.1	111.9	67.7	52.0	41.8	34.2	29.8	24.0	20.0	10.72
1.75V/cell	411.1	352.2	273.8	189.8	148.5	117.0	70.2	53.0	42.8	35.1	30.6	24.5	20.2	10.82
1.70V/cell	448.1	347.2	287.7	197.5	154.4	120.7	73.0	54.5	43.9	36.0	31.2	24.8	20.4	11.02
1.65V/cell	483.6	369.2	305.7	208.4	158.3	124.8	75.0	56.8	45.4	37.0	31.9	25.2	20.8	11.16
1.60V/cell	\	394.8	325.6	220.0	165.0	129.2	77.6	58.5	46.8	38.2	32.6	25.4	21.0	11.22

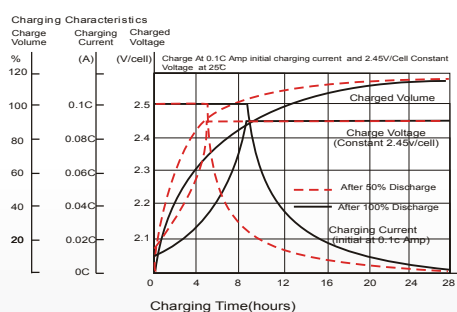
Constant Power Discharge (Watts) at 25°C (77°F)

F.V/Time	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	546.3	464.5	410.3	297.7	238.1	193.8	120.9	94.5	76.7	62.5	54.9	44.8	37.4	21.3
1.80V/cell	688.8	552.9	477.6	347.1	274.6	215.8	131.1	101.2	81.5	66.9	58.6	47.5	39.6	21.4
1.75V/cell	747.5	598.1	509.6	358.5	283.6	224.9	135.6	102.8	83.2	68.6	60.1	48.3	40.0	21.6
1.70V/cell	803.4	663.9	532.5	371.7	294.1	231.5	140.7	105.4	85.2	70.1	61.3	48.9	40.3	22.0
1.65V/cell	860.8	669.7	563.0	390.3	300.3	238.5	144.2	109.6	87.9	72.0	62.6	49.6	41.1	22.2
1.60V/cell	\	707.6	593.6	408.1	310.2	244.9	148.1	112.4	90.3	74.0	63.8	50.0	41.5	22.3

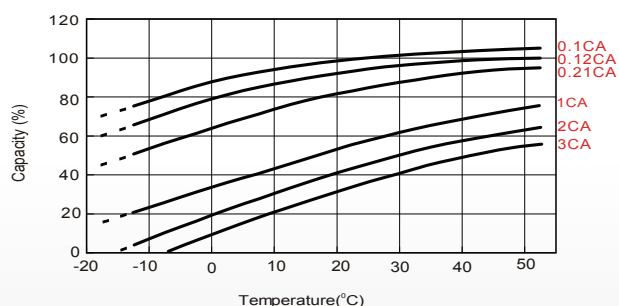
Discharge Characteristics



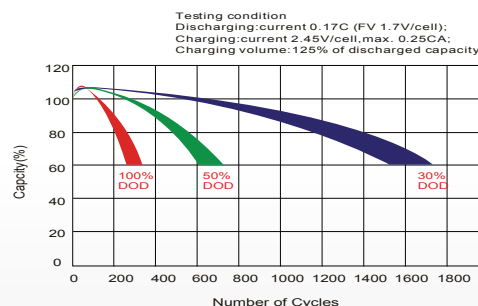
Charging Characteristics (cycle use)



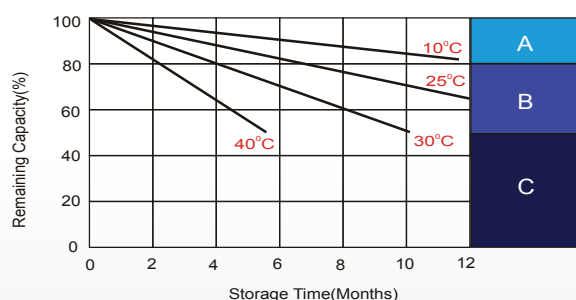
Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- A** No supplementary charge required
(Carry out 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.

ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE