

UCG55-12



Physical Specification

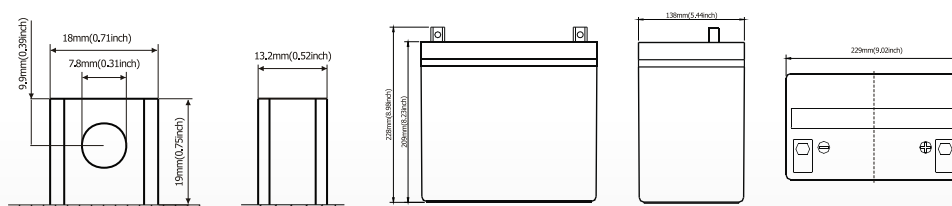
Part Number:	UCG55-12
Length:	229 ± 2 mm (9.02 inches)
Width:	138 ± 2 mm (5.43inches)
Container Height:	209 ± 2 mm (8.23 inches)
Total Height (with terminal):	228 ± 2 mm (8.82 inches)
Approx Weight:	Approx 17kg (37.48lbs)

Specifications

Terminal Type	Normal Voltage	12V
	Normal Capacity (20HR)	55.0AH
	Standard Terminal	F9
Container Material	Optional Terminal	-
	Standard Option	ABS
Rated Capacity	Flame Retardant Option (FR)	ABS(UL94:VO)
	61.0 AH/2.8A	(20hr, 1.80V/cell, 25°C / 77°F)
	52.25 AH/5.225A	(10hr, 1.80V/cell, 25°C / 77°F)
	46.75 AH/9.35A	(5hr, 1.75V/cell, 25°C / 77°F)
Max Discharge Current	33.0 AH/33.0A	(1hr, 1.60V/cell, 25°C / 77°F)
Internal Resistance	16.5A	
Discharge Characteristics	Fully Charged at 25°C 0.006 Ohm	
	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 - Voltage 14.4V ~ 15.0V at 25°C (77°F) Temp. Coefficient -24mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.6V ~ 13.8V at 25°C (77°F) Temp. Coefficient -18mV/°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	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

F9 Terminal



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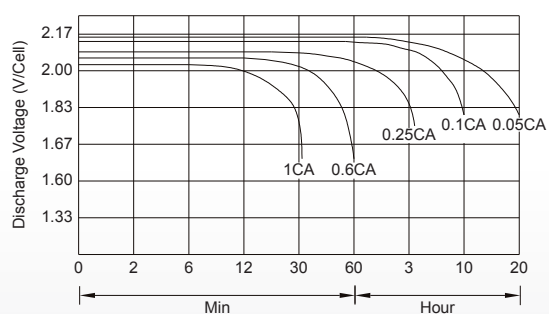
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	5 min	10 min	15 min	30 min	1h	3h	5h	10h	20h
1.60V/cell	193	132	96.3	57.8	36.3	15.0	10.5	5.83	2.90
1.67V/cell	173	120	93.5	56.1	36.2	15.0	10.4	5.74	2.89
1.70V/cell	164	116	90.2	55.0	36.1	15.0	10.4	5.70	2.89
1.75V/cell	146	107	85.3	53.9	35.8	14.9	10.3	5.60	2.88
1.80V/cell	132	100	81.4	52.3	35.3	14.8	10.2	5.50	2.77
1.85V/cell	100	82	70.4	48.1	34.9	14.7	10.2	5.41	2.73

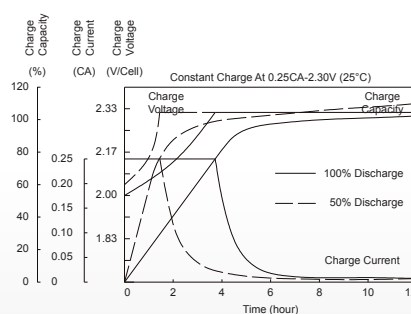
Constant Power Discharge (Watts) at 25°C (77°F)

F.V/Time	5 min	10 min	15 min	30 min	1h	3h	5h	10h	20h
1.60V/cell	317	219	171	109	71.5	28.8	20.1	11.7	5.80
1.67V/cell	301	216	169	107	69.1	28.8	20.1	11.5	5.78
1.70V/cell	281	211	166	104	67.3	28.8	20.1	11.4	5.78
1.75V/cell	262	197	156	101	66.7	28.4	19.9	11.2	5.75
1.80V/cell	235	183	147	98.5	65.6	28.0	19.5	11.0	5.55
1.85V/cell	188	152	128	90.2	65.0	27.9	19.3	10.8	5.45

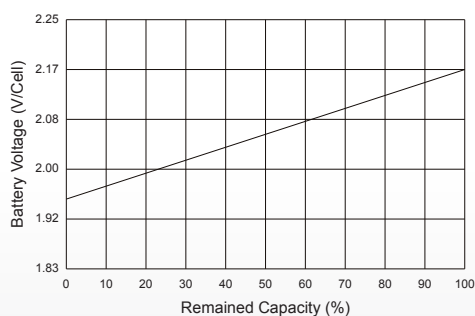
Discharge Characteristics



Charge Characteristics



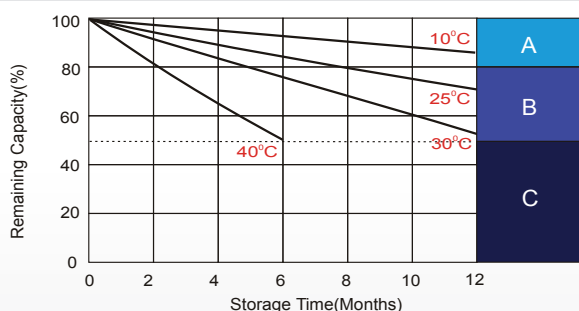
Relationship of OCV and state of charge



Life Expectancy Cycle Use

- 100% depth of discharge 350 cycles
- 80% depth of discharge 600 cycles
- 50% depth of discharge 900 cycles
- 30% depth of discharge 1500 cycles
- 20% depth of discharge 1700 cycles

Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

Supplementary charge required before use. Optional charging way as below:

- B**
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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