UCG 690-2
2V 690AH-C100
Deep Cycle Gel

Ultracell®
'Quality in Every Language'

UCG690-2

Physical Specification

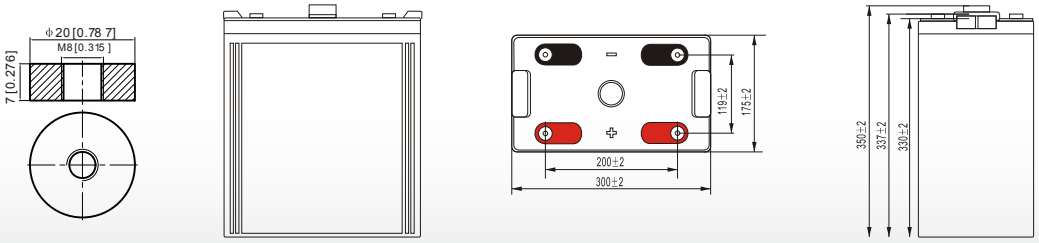
Part Number:	UCG690-2
Length:	300 ± 2 mm (11.81 inches)
Width:	175 ± 2 mm (6.89 inches)
Container Height:	330 ± 2 mm (12.99 inches)
Total Height (with terminal):	350 ± 2 mm (13.78 inches)
Approx Weight:	Approx 36.5 kg (80.48lbs)

Specifications

	Nominal Voltage	2V
	Nominal Capacity (100HR)	690AH
Terminal Type	Standard Terminal	F11
	Optional Terminal	-
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	640.0 AH/32.0A	(20hr,1.80V/cell, 25°C / 77°F)
	600.0 AH/60.00A	(10hr,1.80V/cell, 25°C / 77°F)
	516.0 A H/103.2A	(5hr,1.75V/cell, 25°C / 77°F)
	448.8 AH/149.6A	(3hr,1.75V/cell, 25°C / 77°F)
	352.0 AH/352.0A	(1hr,1.60V/cell, 25°C / 77°F)
Max Discharge Current	4200A (5s)	
Internal Resistance	Approx 0.62mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -20 ~ 55°C (-4 ~ 131°F)
		Charge: 0 ~ 40°C (32 ~ 104°F)
		Storage: -20 ~ 50°C (-4 ~ 122°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Inital Charging Current less than 150.0A.Voltage 2.4V ~ 2.5V at 25°C (77°F) Temp. Coefficient -5mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 2.25V ~ 2.3V at 25°C (77°F) Temp. Coefficient -3mV/°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(°77F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.	

Dimensions

F11 Terminal



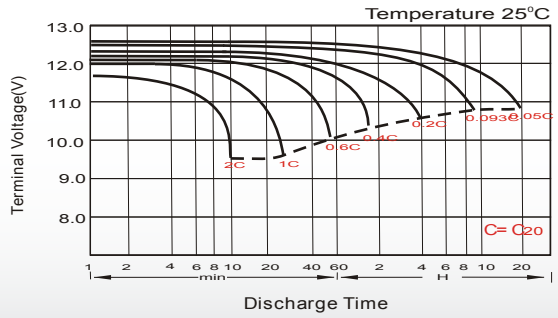
Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	522.0	410.4	312.8	271.8	173.4	132.2	109.5	94.6	81.6	72.3	65.2	59.5	56.3	30.7
1.80V/cell	599.4	458.4	345.6	300.0	187.8	141.6	116.1	99.4	85.7	75.6	68.3	62.7	58.9	32.0
1.75V/cell	673.2	504.0	372.8	320.4	198.9	149.6	121.7	103.2	88.7	78.3	70.5	64.5	60.0	32.6
1.70V/cell	725.4	540.0	396.0	339.6	210.9	155.8	125.6	106.3	91.8	80.9	72.6	66.2	61.4	33.1
1.67V/cell	754.2	561.6	410.4	352.0	216.3	160.8	128.7	108.6	93.3	82.1	73.7	67.1	62.2	33.4
1.60V/cell	817.2	600.0	440.8	373.8	225.0	167.2	133.5	112.0	95.6	83.8	75.0	68.5	63.4	33.9

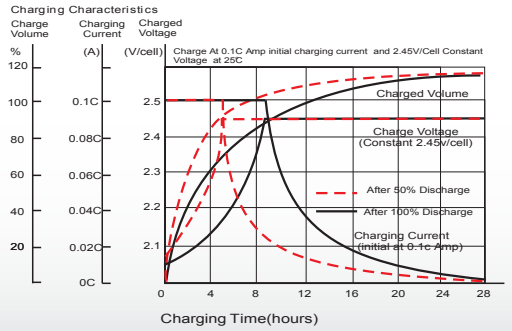
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	991.3	784.7	601.8	525.1	336.2	257.0	213.7	185.2	160.4	142.4	128.7	117.7	111.5	60.9
1.80V/cell	1123.3	868.2	658.7	576.6	362.3	274.3	225.7	194.0	167.9	148.5	134.5	123.6	116.2	63.3
1.75V/cell	1247.4	944.0	704.2	612.6	382.7	289.2	235.8	200.5	173.1	153.5	138.5	127.1	118.4	64.5
1.70V/cell	1329.7	1004.4	745.3	646.9	403.9	300.2	242.7	206.2	178.9	158.3	142.4	130.3	121.1	65.3
1.67V/cell	1366.6	1030.5	765.4	665.3	412.1	308.6	248.0	209.8	181.3	160.1	144.1	131.8	122.3	65.8
1.60V/cell	1464.4	1093.8	817.7	702.7	426.6	319.4	256.5	215.6	185.2	163.0	146.5	134.3	124.5	66.7

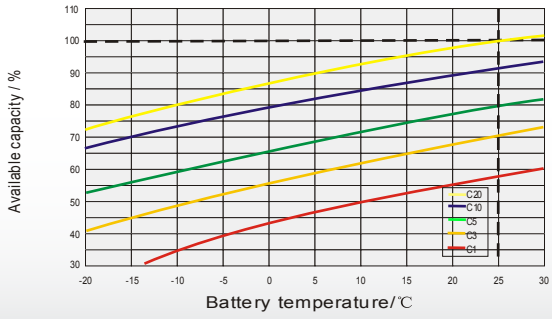
Discharge Characteristics



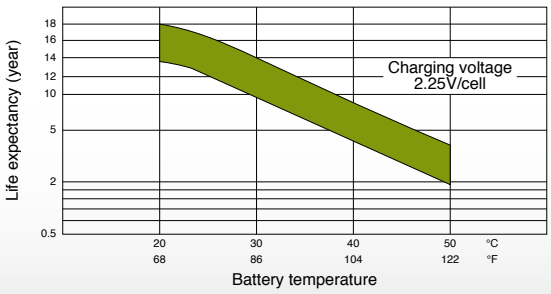
Float Charging Characteristics



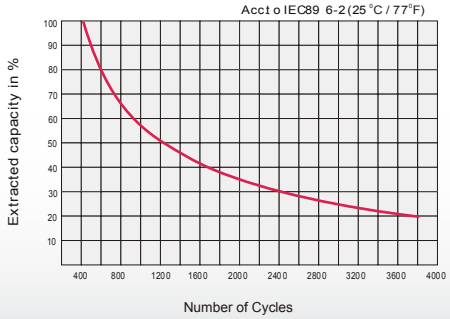
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time