UCG 40-12
12V 40AH
Deep Cycle

Ultracell®
'Quality in Every Language'

UCG40-12

Physical Specification

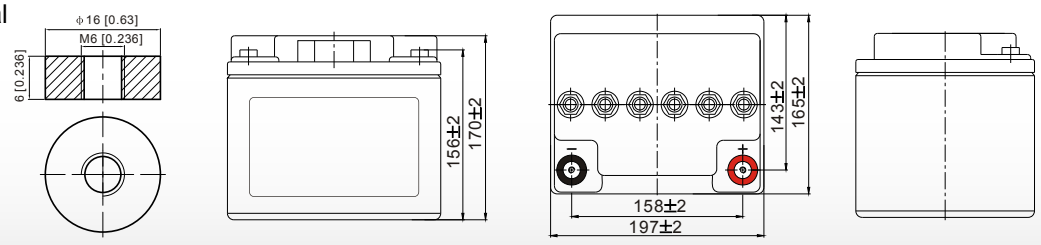
Part Number:	UCG40-12
Length:	197 ± 2 mm
Width:	165 ± 2 mm
Container Height:	170 ± 2 mm
Total Height (with terminal):	170 ± 2 mm
Approx Weight:	Approx 14.2 kg

Specifications

	Nominal Voltage	12V
	Nominal Capacity (10HR)	40AH
Terminal Type	Standard Terminal	F6
	Optional Terminal	-
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	41.6 AH/1.90A	(20hr,1.80V/cell, 25°C / 77°F)
	40 AH/3.53A	(10hr,1.80V/cell, 25°C / 77°F)
	30.4 AH/6.08A	(5hr,1.75V/cell, 25°C / 77°F)
	26.5 AH/8.82A	(3hr,1.75V/cell, 25°C / 77°F)
	20.9 AH/20.9A	(1hr,1.60V/cell, 25°C / 77°F)
Max Discharge Current	380A (5s)	
Internal Resistance	Approx 10.5mΩ	
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 9.5A.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(°77F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.	

Dimensions

F6 Terminal



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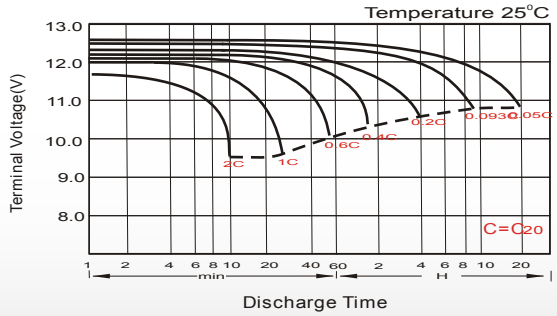
Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	32.1	25.2	19.3	16.1	10.2	7.79	6.45	5.57	4.81	4.26	3.84	3.51	3.32	1.82
1.80V/cell	36.8	28.2	21.2	17.8	11.1	8.35	6.84	5.85	5.05	4.46	4.02	3.69	3.47	1.90
1.75V/cell	41.4	31.0	23.0	19.0	11.7	8.82	7.16	6.08	5.23	4.61	4.15	3.80	3.53	1.94
1.70V/cell	44.6	33.2	24.4	20.1	12.4	9.18	7.40	6.27	5.41	4.77	4.28	3.90	3.62	1.96
1.67V/cell	46.4	34.5	25.2	20.9	12.7	9.47	7.58	6.40	5.50	4.84	4.34	3.95	3.66	1.98
1.60V/cell	50.3	36.9	27.1	22.2	13.3	9.85	7.87	6.60	5.63	4.94	4.42	4.04	3.73	2.01

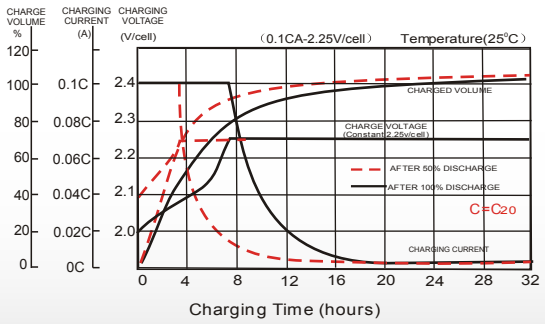
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	61.5	48.6	37.3	31.4	20.0	15.3	12.7	11.0	9.52	8.45	7.64	6.99	6.61	3.64
1.80V/cell	69.6	53.8	40.9	34.4	21.5	16.3	13.4	11.5	10.0	8.82	7.98	7.33	6.90	3.79
1.75V/cell	77.3	58.7	43.9	36.7	22.7	17.2	14.0	11.9	10.3	9.11	8.22	7.54	7.03	3.86
1.70V/cell	82.4	62.3	46.2	38.6	24.0	17.8	14.4	12.3	10.6	9.39	8.45	7.74	7.18	3.90
1.67V/cell	84.8	64.0	47.5	39.8	24.5	18.3	14.7	12.5	10.8	9.50	8.56	7.82	7.26	3.94
1.60V/cell	90.8	67.9	50.7	42.1	25.3	19.0	15.2	12.8	11.0	9.68	8.69	7.97	7.39	3.99

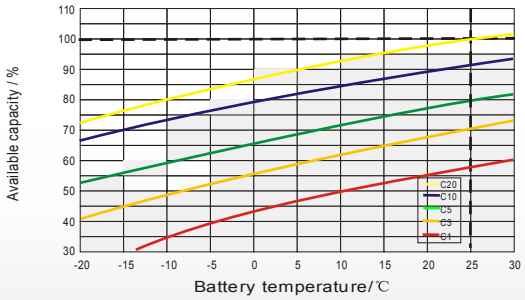
Discharge Characteristics



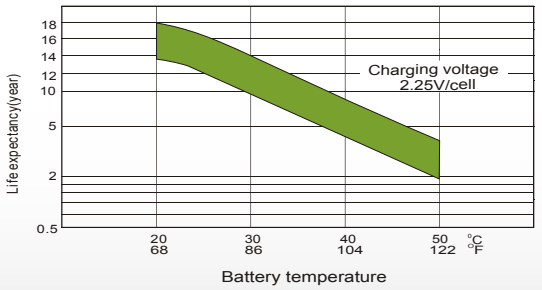
Float Charging Characteristics



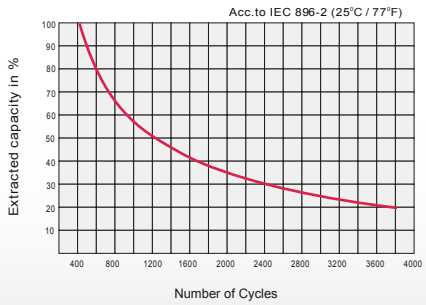
Temperature Effects in Relation to Battery Capacity



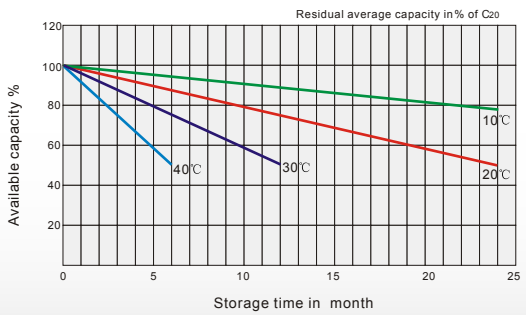
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



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