

UCG105-12



Physical Specification

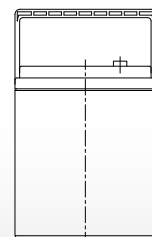
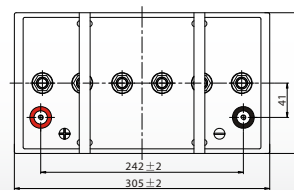
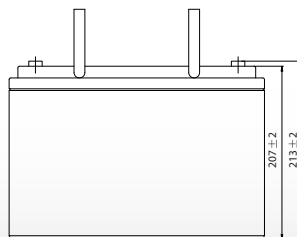
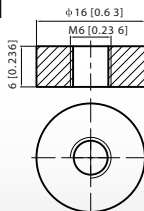
Part Number:	UCG105-12
Length:	410 ± 2 mm
Width:	177 ± 2 mm
Container Height:	225 ± 2 mm
Total Height (with terminal):	225 ± 2 mm
Approx Weight:	Approx 32.0 kg

Specifications

	Nominal Voltage	12V
	Nominal Capacity (20HR)	105.0AH
Terminal Type	Standard Terminal	F11
	Optional Terminal	-
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	109.2 AH/5.50A	(20hr, 1.80V/cell, 25°C / 77°F)
	105.0 AH/10.23A	(10hr, 1.80V/cell, 25°C / 77°F)
	88.0 AH/17.6A	(5hr, 1.75V/cell, 25°C / 77°F)
	76.5 AH/25.5A	(3hr, 1.75V/cell, 25°C / 77°F)
	60.5 AH/60.5A	(1hr, 1.60V/cell, 25°C / 77°F)
Max Discharge Current	990 A (5s)	
Internal Resistance	Approx 5.1mΩ	
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	Initial Charging Current less than 27.5A. Voltage 14.4V ~ 15.0V at 25°C (77°F) Temp. Coe fficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5V ~ 13.8V at 25°C (77°F) Temp. Coe fficient -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(77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.	

Dimensions

F11 Terminal



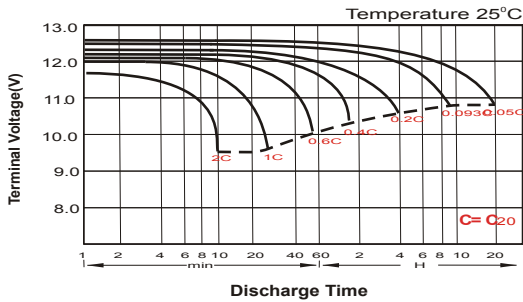
Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	93.1	73.0	55.7	46.6	29.6	22.6	18.7	16.1	13.9	12.3	11.1	10.2	9.60	5.28
1.80V/cell	106.6	81.6	61.5	51.5	32.0	24.2	19.8	16.9	14.6	12.9	11.6	10.7	10.0	5.50
1.75V/cell	119.8	89.8	66.4	55.1	33.9	25.5	20.7	17.6	15.1	13.4	12.0	11.0	10.23	5.61
1.70V/cell	129.0	96.1	70.5	58.3	36.0	26.6	21.4	18.2	15.7	13.8	12.4	11.3	10.5	5.68
1.67V/cell	134.3	99.9	73.0	60.5	36.9	27.4	21.9	18.5	15.9	14.0	12.6	11.4	10.6	5.74
1.60V/cell	145.5	106.9	78.5	64.2	38.4	28.5	22.8	19.1	16.3	14.3	12.8	11.7	10.8	5.82

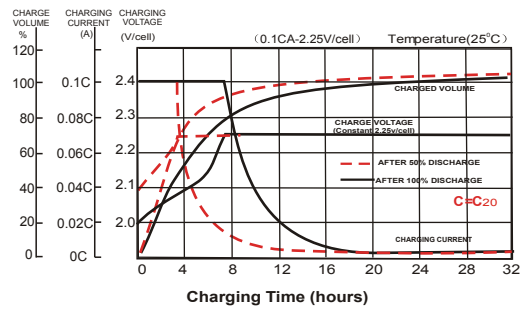
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	178.1	140.7	108.1	90.8	57.8	44.2	36.7	31.8	27.6	24.5	22.1	20.2	19.1	10.5
1.80V/cell	201.3	155.8	118.3	99.7	62.3	47.2	38.8	33.3	28.8	25.5	23.1	21.2	20.0	11.0
1.75V/cell	223.8	169.8	127.0	106.2	65.8	49.7	40.5	34.5	29.8	26.4	23.8	21.8	20.3	11.2
1.70V/cell	238.4	180.3	133.8	111.7	69.4	51.6	41.7	35.5	30.7	27.2	24.5	22.4	20.8	11.3
1.67V/cell	245.4	185.3	137.6	115.3	70.9	53.0	42.6	36.1	31.2	27.5	24.8	22.6	21.0	11.4
1.60V/cell	263.0	196.5	146.7	121.7	73.4	54.9	44.1	37.1	31.8	28.0	25.2	23.1	21.4	11.5

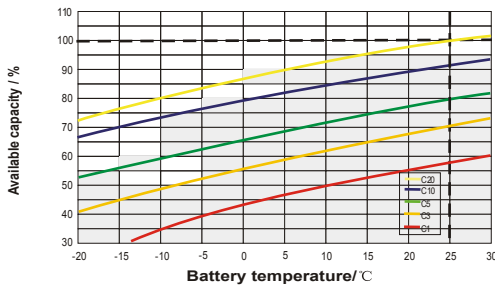
Discharge Characteristics



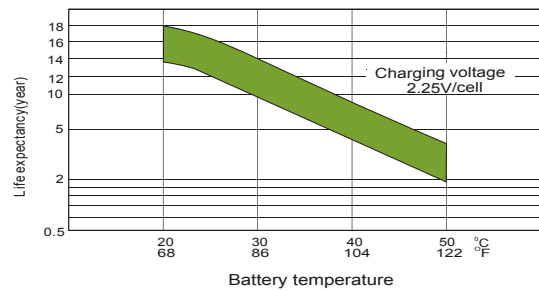
Charging Characteristics



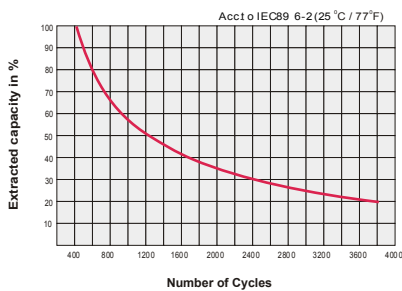
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time

