

### UCG24-12



### Physical Specification

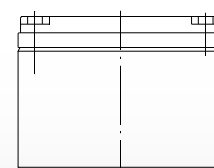
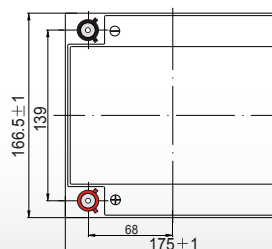
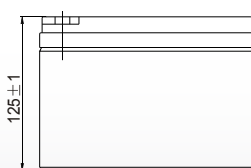
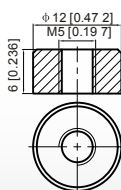
Part Number:	UCG24-12
Length:	166 ± 2 mm
Width:	175 ± 2 mm
Container Height:	125 ± 2 mm
Total Height (with terminal):	125 ± 2 mm
Approx Weight:	Approx 8.4 kg

### Specifications

	Nominal Voltage	12V	
	Nominal Capacity (20HR)	24.0AH	
Terminal Type	Standard Terminal	F12	
	Optional Terminal	F3	
Container Material	Standard Option	ABS	
	Flame Retardant Option (FR)	ABS (UL94:VO)	
Rated Capacity	24.9 AH/1.20A	(20hr, 1.80V/cell, 25°C / 77°F)	
	24.0 AH/2.23A	(10hr, 1.80V/cell, 25°C / 77°F)	
	19.2 A H/3.84A	(5hr, 1.75V/cell, 25°C / 77°F)	
	16.7 AH/5.57A	(3hr, 1.75V/cell, 25°C / 77°F)	
	13.2 AH/13.2A	(1hr, 1.60V/cell, 25°C / 77°F)	
Max Discharge Current	288A (5s)		
Internal Resistance	Approx 15.8mΩ		
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 6.0A. Voltage	
	Standby Use	14.4V ~ 15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C	
		No limit on Initial Charging Current Voltage	
Capacity affected by Temperature	13.5V ~ 13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C		
	40°C (104°F)	103%	
	25°C (77°F)	100%	
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

#### F12 Terminal



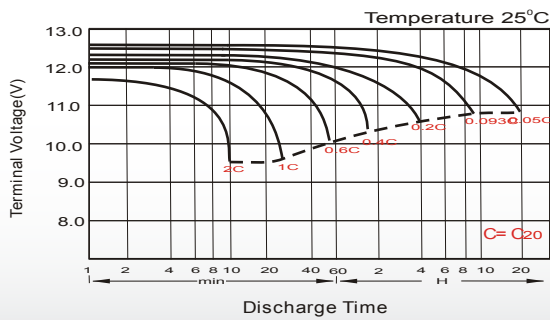
## Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	20.3	15.9	12.2	10.2	6.46	4.92	4.07	3.52	3.04	2.69	2.42	2.22	2.10	1.15
1.80V/cell	23.3	17.8	13.4	11.2	6.98	5.27	4.32	3.70	3.19	2.81	2.54	2.33	2.19	1.20
1.75V/cell	26.1	19.6	14.5	12.0	7.40	5.57	4.52	3.84	3.30	2.91	2.62	2.40	2.23	1.22
1.70V/cell	28.2	21.0	15.4	12.7	7.85	5.80	4.67	3.96	3.42	3.01	2.70	2.46	2.28	1.24
1.67V/cell	29.3	21.8	15.9	13.2	8.05	5.98	4.79	4.04	3.47	3.05	2.74	2.50	2.31	1.25
1.60V/cell	31.8	23.3	17.1	14.0	8.38	6.22	4.97	4.17	3.56	3.12	2.79	2.55	2.36	1.27

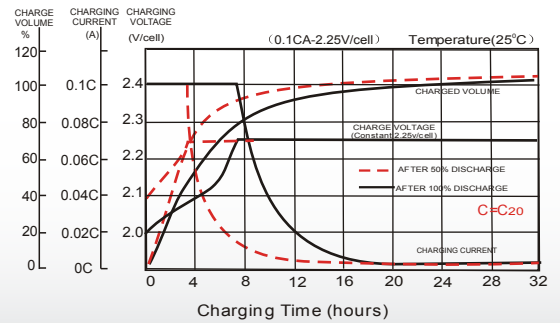
## Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	38.9	30.7	23.6	19.8	12.6	9.64	8.01	6.95	6.01	5.34	4.82	4.41	4.18	2.30
1.80V/cell	43.9	34.0	25.8	21.8	13.6	10.3	8.46	7.27	6.29	5.57	5.04	4.63	4.36	2.39
1.75V/cell	48.8	37.0	27.7	23.2	14.4	10.8	8.84	7.53	6.50	5.75	5.19	4.76	4.44	2.44
1.70V/cell	52.0	39.3	29.2	24.4	15.1	11.3	9.10	7.74	6.71	5.93	5.34	4.89	4.54	2.47
1.67V/cell	53.5	40.4	30.0	25.1	15.5	11.6	9.30	7.88	6.80	6.00	5.41	4.94	4.58	2.49
1.60V/cell	57.4	42.9	32.0	26.6	16.0	12.0	9.62	8.10	6.94	6.12	5.49	5.03	4.67	2.52

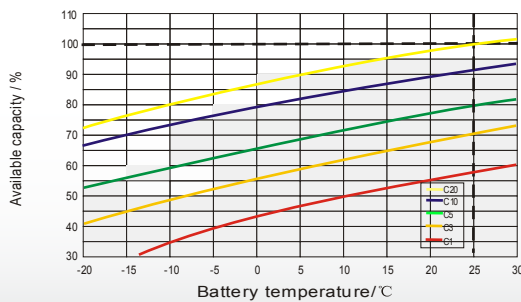
### Discharge Characteristics



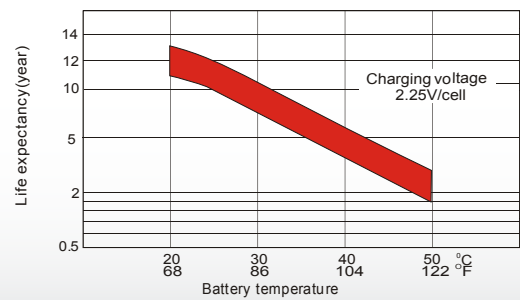
### Float Charging Characteristics



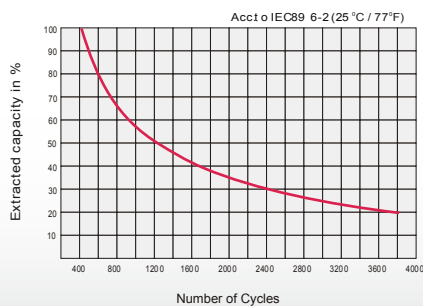
### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS. Storage Time

